

CLASS 105, RAILWAY ROLLING STOCK**SECTION I - CLASS DEFINITION**

This class is restricted to wheeled transportation equipment for railways. The rolling stock or equipment may be for use on monorail, two-rail, elevated, suspended, or cable railways.

SECTION II - LINES WITH OTHER CLASSES AND WITHIN THIS CLASS

Patents for railway wheel rolling stock under the class definition comprising a plurality of wheeled cars or train elements adapted to be attached trailing together and adapted to travel sequentially along a rail and axles are separately classified in Class 295, Railway Wheels and Axles.

SECTION III - REFERENCES TO OTHER CLASSES**SEE OR SEARCH CLASS:**

- 49, Movable or Removable Closures, appropriate subclasses for closures of the type provided for and see the search notes in section IV, References to other classes, of Class 49 for the loci of closures in other classes.
- 295, Railway Wheels and Axles, (see Lines with Other Classes, above).
- 305, Wheel Substitutes for Land Vehicles, subclass 8 for a wheel substitute modified to travel on a railroad rail.
- 410, Freight Accommodation on Freight Carrier, subclass 28 for a drop-center car for the tiered stowage of vehicles as objects of freight; and subclass 45 for stowage of a massive, e.g., massively tall, etc., article on a drop-center car.
- 446, Amusement Devices: Toys, subclass 25 for smoking toy locomotives; and subclasses 431-471 for other toy rolling stock having a structural detail not suitable for a full size train.

SUBCLASSES**1.1 STREAMLINE FORM ROLLING STOCK:**

This subclass is indented under the class definition. Rolling stock having exterior surface configuration designed to promote smooth air-

flow thereover when passing through the air, so as to create a minimum amount of resistance of the train to movement and to create a minimum of air turbulence.

1.2**Airlift or ducted:**

This subclass is indented under subclass 1.1. Rolling stock of such configuration that ambient air is forced vertically upward by the rolling stock passing therethrough; or including a tublike passage to direct air from a high pressure surface of the rolling stock to a relatively low pressure surface thereof.

- (1) Note. Control of vertical movement of air, e.g., provision to prevent disturbance of overhead power lines, etc., is included herein.

SEE OR SEARCH THIS CLASS, SUBCLASS:

- 74, for a locomotive having an inclined planar surface intended to react with ambient atmosphere to increase downward pressure on the wheels to thereby increase traction.

1.3**Having laterally movable air directing member:**

This subclass is indented under subclass 1.1. Train including air flow controlling structure movable normally with respect to the remainder thereof and with respect to the direction of travel.

- (1) Note. Included herein is a streamline surface on the front of a locomotive shiftable to provide access to a front coupler.
- (2) Note. A laterally movable member intended to interrupt smooth air flow and provide increased friction, i.e., a brake, is included in this subclass.

1.4**TRAINS:**

This subclass is indented under the class definition. Rolling stock comprising a plurality of wheeled cars or train elements adapted to be attached trailing together and adapted to travel sequentially along a rail.

1.5 Toy or model train:

This subclass is indented under subclass 1.4. Train intended for entertainment, of inadequate size to be used for transportation of people and not intended to be used for transportation of produce.

- (1) Note. A model train, even though structurally identical to a conventional train is included in this subclass, since it is not for transportation of people or produce.

3 Articulated:

This subclass is indented under subclass 1.4. Train (a) comprising plural cars pivotally connected but not readily detachable from each other; or (b) including a first car supporting truck connected to a second car supporting truck so that they mutually interact to steer each other or prevent excessive independent oscillation of the cars when traveling over straight and variously curved track.

- (1) Note. A coupling, per se, not specifically provided for elsewhere, for an articulated train is included herein.

SEE OR SEARCH THIS CLASS, SUB-CLASS:

175.1, for a railway truck including three or more wheels engaging a single rail, with provision to allow lateral movement of at least one wheel so that the truck can round a turn.

SEE OR SEARCH CLASS:

213, Railway Draft Appliances, subclasses 62 through 72 for a rigid train drawbar, per se.
410, Freight Accommodation on Freight Carrier, subclass 45 for articulated car structure for hauling a massive article.

4.1 Two-car truck:

This subclass is indented under subclass 3. Articulated train including a truck adapted to support one end of each of two adjacent car bodies.

- (1) Note. A two-car truck, per se, is considered to be a "train" since it supports a first and a second car.

4.2 Separable bogie:

This subclass is indented under subclass 4.1. Articulated train in which the truck is adapted to be separated into distinct members each including support wheels and each adapted to support one of the adjacent car bodies.

4.3 Truck under first car, second car carried by first:

This subclass is indented under subclass 4.1. Articulated train including a truck supporting the end of a car, which car supports the mating end off a second car.

4.4 Including wheel steering provision:

This subclass is indented under subclass 4.1. Articulated train including a truck supporting the end of a car, which car supports the mating end of a second car.

SEE OR SEARCH THIS CLASS, SUB-CLASS:

165 through 170, for a truck including a plurality of axles with provision to allow each to turn about an axis that intersects the axis of track curvature, especially subclass 169 for such a truck including a stub axle.
176, for a truck adapted to be interconnected with another truck.
180, for a truck including a stub axle, generally.

5 Nontelelescoping:

This subclass is indented under subclass 1.4. Devices for avoidance of telescoping of cars or locomotives in case of collision.

6 Bevel ended:

This subclass is indented under subclass 5. Nontelelescoping locomotives or cars having bevel ends or inclines for opposite lateral diversion of adjacent ends in case of heavy impact.

7 One-track passage:

This subclass is indented under subclass 1.4. Trains or cars adapted to pass each other on the same track without collision.

8.1 Vestibule connections:

This subclass is indented under subclass 1.4. Train including a connection between adjacent cars in addition to the draft/buff coupler to restrict or otherwise provide for relative movement between the cars, to transmit energy, information, etc., from one car to another and to render the train effectively a continuous unit.

- (1) Note. Included herein is a car body connection allowing movement of a passenger from one car to another and a car body connection between adjacent freight cars without provision to allow passenger movement.

SEE OR SEARCH CLASS:

160, Flexible or Portable Closure, Partition, or Panel, appropriate subclasses for such a device not restricted to train structure.

9 Cab and tender:

This subclass is indented under subclass 8.1. Devices including special forms of vestibule connection between a locomotive cab and tender or between a tender and car.

10 Face-plate expanders:

This subclass is indented under subclass 8.1. Devices including means by which the diaphragm face-plates of adjoining cars are brought together and maintained under pressure in such position.

11 Pneumatic:

This subclass is indented under subclass 10. Devices including face-plate expanders in which the object is accomplished by air pressure.

12 Gravity:

This subclass is indented under subclass 10. Devices including weighted means for accomplishing the object and also sliding or link connections in which the diaphragm face-plates are brought together and so maintained by the weight of the diaphragms and face-plates.

13 Vertical equalizing:

This subclass is indented under subclass 10. Devices including face-plate expanders in which the mechanism is so arranged that move-

ment of one end of the diaphragm face-plate will be transmitted through the mechanism, so as to cause movement of the opposite end of the face-plate.

14 Top bow spring:

This subclass is indented under subclass 10. Devices including face-plate expander in which the upper portions of the diaphragm face-plates of adjoining cars are brought together and so maintained by the action of a single-trip bow-spring, and including supporting means for said spring.

15 Diaphragms:

This subclass is indented under subclass 8.1. Devices including vestibule-diaphragms forming a closed connection between the car ends.

16 Metallic:

This subclass is indented under subclass 15. Devices in which the diaphragm is metallic.

17 Telescopic:

This subclass is indented under subclass 16. Devices in which the diaphragm-plates of adjoining cars have telescopic connection or in which the diaphragm-plates and the car-body to which they are attached have telescopic connection.

- (1) Note. This subclass also includes telescopic metal cover-plates for diaphragms.

18 Bellows fold:

This subclass is indented under subclass 15. Devices involving the specific construction of the folding bellows of vestibule-cars, including the composition of fabric, and without regard to the means of fastening same to the car-body or face-plate.

19 Slit plaits:

This subclass is indented under subclass 18. Devices including folding-bellows diaphragms in which the legs of the bellows are formed of two separate pieces, with fastening means releasable under tension, so as to allow outward tilting of the face-plate for repairs.

- 20 Fasteners:**
This subclass is indented under subclass 18. Devices including means for fastening the folding diaphragms to the car face-plates or the diaphragm face-plates, either permanently or releasably.
- 21 Face plates:**
This subclass is indented under subclass 8.1. Devices including specific face-plate construction and also lock or catch means for holding adjoining face-plates in catching engagement.
- 22 Vertical hanger rod:**
This subclass is indented under subclass 21. Devices including means for preventing diaphragm face-plates and parts connected thereto from sagging and consisting of resilient vertical hanger-rods extending from the car-body to the face-plate.
- 23 Curtain releasers:**
This subclass is indented under subclass 8.1. Devices including releasable means for vestibule-curtains connecting adjacent cars in which the releasing operation takes place automatically on the pulling apart of the cars.
- 24 Trip handles:**
This subclass is indented under subclass 23. Devices in which the curtain-handle is pivoted at one end and at the other end releasably held in engagement with a fixed catch member.
- 25 Twin jaws:**
This subclass is indented under subclass 23. Devices in which the catch mechanism consists of twin jaws arranged on either the curtain or on the adjoining car and releasably engaging a fixed element on the opposite member.
- 25.1 Ventilation:**
This subclass is indented under subclass 8.1. Train including provision to permit passage to ambient atmosphere therethrough.
- 25.2 Resilient mounting drive connection for shear stress:**
This subclass is indented under subclass 1.4. Train including drive structure having a portion thereof intended to yield within its elastic limit to prevent destructive failure thereof.
- 26.05 LOCOMOTIVES:**
This subclass is indented under the class definition. Rolling stock comprising a railway vehicle (or traction machine) including drive structure having a portion thereof.
- SEE OR SEARCH THIS CLASS, SUBCLASS:
90.1 through 90.2, for a device under the instant control of a trackman for forcing a railway vehicle to move a short
- 26.1 Trackman's-car type:**
This subclass is indented under subclass 26.05. Devices comprising (1) power propelled railway vehicles operated by a walking attendant or (2) relatively small railway vehicles similar to the hand cars or railway velocipedes classified in this class, subclass 86, but having power propulsion means.
- 27 Auxiliary function:**
This subclass is indented under subclass 26.05. Self-propelled power tools and locomotives provided with auxiliary power devices, such as wind-lasses or motors for general use.
- 28 Turntables:**
This subclass is indented under subclass 26.05. Self-propelled power tools and locomotives modified by the provision of a turntable, which usually carries the power plant, as in case of a mounted railway crane or excavator.
- SEE OR SEARCH THIS CLASS, SUBCLASS:
275, for horizontally rotary tilting dumping car bodies.
455, for horizontal rotary rolling stock generally.
- 29.1 With rack rail engaging drive:**
This subclass is indented under subclass 26.05. Locomotive including drive structure adapted to engage for propelling thrust, a toothed bar (a) parallel to a support rail therefor or (b) comprising a support rail therefor.
- 29.2 Toy or model locomotive:**
This subclass is indented under subclass 29.1. Locomotive intended for entertainment, of inadequate size to be used for transportation of

people, and not intended to be used for transportation of produce.

- (1) Note. A model locomotive, even though structurally identical to a conventional locomotive, is included in this subclass, since it is not for transportation of people or produce.

SEE OR SEARCH CLASS:

446, Amusement Devices: Toys, subclass 410 for a toy locomotive, generally e.g., a locomotive, etc., which as claimed structure, even if enlarged, would not be a locomotive of the type found in this class.

30 Gripping drivers:

This subclass is indented under subclass 26.05. Locomotives having drive wheels which grip the opposite sides or tops and bottoms of a rail or may be pressed against one side of a rail-head.

31 Track pushers:

This subclass is indented under subclass 26.05. Locomotives having a propelling mechanism consisting of one or more pusher-bars extending beneath the car and engaging the track or roadbed for pushing the locomotive along the track.

32 Intermittent grip:

This subclass is indented under subclass 26.05. Locomotives having incorporated therein either an axle-driving or axle-driven mechanism, there being included as a link in such driving mechanism an intermittent-grip arrangement or, in case of power-motor drive, the grip may be directly on the axle, adapted to be freely moved in one direction and to have driving engagement with the mechanism when moved in the opposite direction.

33 Driver pick-up:

This subclass is indented under subclass 26.05. Locomotives having means for raising driving-wheels from the rails, as in case of auxiliary drivers or continuously-running engines, or to get the drivers out of the way, as in case of log-loading machines.

34.1 Powered bogie:

This subclass is indented under subclass 26.05. Locomotive including an assembly comprised of a pair of wheels, and supporting framework to carry a distinct vehicle body; constructed for connection to a vehicle-body with capability of swiveling motion as a unit with relation thereto.

- (1) Note. A bogie including a positively recited "third rail" electrical collector is considered to be a "locomotive" for placement herein.

SEE OR SEARCH CLASS:

191, Electricity: Transmission to Vehicles, appropriate subclasses for a track-engaging electrical collector, per se, to be used as part of the combined bogie of this subclass.

34.2 Secondary traction device on locomotive:

This subclass is indented under subclass 34.1. Locomotive including a first track engaging means for generating thrust to propel the locomotive and, on the same locomotive, a powered bogie also for generating thrust to propel the locomotive.

35 Generating electric:

This subclass is indented under subclass 26.05. Locomotives in which a prime mover, such as a stream or explosive-gas engine, runs a dynamo for generating electricity, which supplies current for electric motors to drive the locomotive.

SEE OR SEARCH CLASS:

290, Prime-Mover Dynamo Plants, subclasses 9 through 29 (subclasses indented under "Traction") for arrangements wherein a nonelectric prime mover driven electric generator supplies a traction motor, and subclasses 9 through 21 for prime mover driven generator supplied electric traction motor systems.

318, Electricity: Motive Power Systems, subclasses 140 through 158 for generator-fed motor systems having generator control.

322, Electricity: Single Generator Systems, appropriate subclasses for generator control systems.

- 36 Turbine:**
This subclass is indented under subclass 35. Locomotives in which the prime mover is a steam-turbine, commonly called "turbo-electric".
- 37 Steam:**
This subclass is indented under subclass 26.05. Locomotives in which steam furnishes the motive power.
- (1) Note. This subclass is limited to the driving connections and arrangement and location of parts on the frame.
- 38 Turbine:**
This subclass is indented under subclass 37. Locomotives in which a rotary piston or steam-turbine wheel is used as the prime mover.
- SEE OR SEARCH THIS CLASS, SUB-CLASS:
61.5, for a locomotive prime mover comprising a turbine driven by gaseous products of combustion.
- 39 Compound:**
This subclass is indented under subclass 37. Locomotives of the compound type in which steam exhausts from a high- to a low-pressure cylinder.
- (1) Note. This subclass merely relates to the driving connections and general arrangement of cylinders on a locomotive.
- 40 Articulated boilers:**
This subclass is indented under subclass 37. Locomotives having boilers provided with flexible steam tight joints, so that the boiler may flex in going around a curve.
- 41 Center firebox twin:**
This subclass is indented under subclass 37. A double locomotive built together rear to rear, so that the fire-boxes are at the center of the locomotive.
- 42 Transverse cylinder:**
This subclass is indented under subclass 37. Locomotives in which the piston-cylinders have their axes at right angles to the length of the locomotives.
- 43 Boilers:**
This subclass is indented under subclass 37. Locomotive apparatus comprising boilers.
- (1) Note. This subclass includes only such patents as relate to boiler shape, arrangement, or fastenings designed for use on locomotives.
- 44 Saddles:**
This subclass is indented under subclass 43. Devices comprising seats or saddles for supporting locomotive steam boilers, usually at the front end, and providing for boiler expansion.
- SEE OR SEARCH THIS CLASS, SUB-CLASS:
362, for freight cars having saddles for tanks.
- 45 Superheaters:**
This subclass is indented under subclass 37. Apparatus including location, arrangement, and special construction of super-heaters particularly adapted for use on steam locomotives.
- 46 Firebox arrangement:**
This subclass is indented under subclass 37. Apparatus relating to fire-box arrangement, shape, and location for locomotives.
- 47 Articulated pipes:**
This subclass is indented under subclass 37. Locomotive apparatus relating to movably jointed and flexible pipes for connection between relatively movable parts of locomotives.
- 48 Control:**
This subclass is indented under subclass 37. Devices for controlling the operation of a steam locomotive.
- 48.1 With coal feeding means (e.g., stokers, etc.):**
This subclass is indented under subclass 37. Devices wherein the locomotive is provided with means to convey solid fuels, such as coal, coke, etc., into the combustion chamber of the locomotive.
- (1) Note. Examples of the type of structures to be found herein are screw-type con-

veyer stokers and pusher-type conveyer stokers.

SEE OR SEARCH THIS CLASS, SUBCLASS:

232, for coal feed structure on locomotive tenders.

SEE OR SEARCH CLASS:

110, Furnaces, subclass 105.5 for locomotive type stokers combined with significant furnace structure or means for feeding air or otherwise promoting combustion but not including significant railway vehicle structure.

198, Conveyors: Power-Driven, appropriate subclasses, especially subclasses 657 through 677 for screw conveyors of general utility.

241, Solid Material Comminution or Disintegration, subclass 276 for locomotive-type stokers provided with comminuting means, but not including significant railway vehicle structure.

48.2 And with or convertible to internal combustion engine:

This subclass is indented under subclass 37. Locomotive (1) including a second prime mover of the type having a enclosed chamber adapted to be filled with gas wherein the gas is explosively ignited; or (2) wherein the prime mover can utilize steam or explosive gas fuel.

(1) Note. The second prime mover may be on a second vehicle attached to that of the first prime mover.

48.3 And/or electric:

This subclass is indented under subclass 37. Locomotive including a second prime mover of a type to which electrical energy is supplied as fuel.

49 Electric:

This subclass is indented under subclass 26.05. Locomotives having electric-motor devices for their propulsion.

(1) Note. Novel features in electric-motor construction are classified here only when their only utility would be on a traveling vehicle.

SEE OR SEARCH CLASS:

310, Electrical Generator or Motor Structure, appropriate subclasses for electric motor structure, particularly subclass 255 for railway-type stator structures.

50 Battery:

This subclass is indented under subclass 49. Electric locomotives which carry primary or storage batteries for the entire or partial supply of electricity to the motors or other car devices.

(1) Note. The charging of the storage battery may or may not be effected from line contact.

SEE OR SEARCH THIS CLASS, SUBCLASS:

35, and 36, for electric locomotives carrying a prime mover for charging storage batteries.

51 Cell disposal:

This subclass is indented under subclass 50. Apparatus relating to holders, automatic circuit-closers, and special location of the battery cells on railway rolling-stock.

52 Double rotor:

This subclass is indented under subclass 49. Electric locomotives in which the field and armature of the electric motor both rotate, but in opposite directions.

53 Wheel rotor:

This subclass is indented under subclass 49. Electric locomotives in which traction wheel contains the electric motor and the rotor is attached to the tire of the wheel.

SEE OR SEARCH CLASS:

310, Electrical Generator or Motor Structure, subclass 67 for a rotary motor or generator inbuilt with another unit such as a wheel.

54 Rotor on axle:

This subclass is indented under subclass 49. Electric locomotives in which the armature is mounted on the axle, thus effecting a gearless drive for an electric locomotive.

- 55 Geared:**
This subclass is indented under subclass 54. The armature or rotor has a reducing-gear connection with the axle.
- 56 Plane field:**
This subclass is indented under subclass 54. Electric locomotives in which the field-pieces are arranged at each side of the armature, i.e., the armature revolves in a vertical plane between the two fields.
- 57 Balanced cylindrical field:**
This subclass is indented under subclass 54. Electric locomotives in which the field is substantially balanced with respect to the axle and is outside the periphery of the armature.
- 58 Twin fields:**
This subclass is indented under subclass 54. Electric locomotives in which the fields have portions in common between two axles, one of which carries an armature.
- 59 Motor coolers:**
This subclass is indented under subclass 49. Devices for cooling and ventilating electric motors in locomotives.
- SEE OR SEARCH CLASS:
310, Electrical Generator or Motor Structure, subclass 16 for cooling of a reciprocating electric motor of generator, and subclasses 52 through 65 for cooling of a rotary electric motor or generator.
- 60 Insulation:**
This subclass is indented under subclass 49. Electric railway apparatus having a special location and arrangement of insulating material between parts of cars or locomotives.
- 61 Control:**
This subclass is indented under subclass 49. Devices for controlling electric locomotives.
- SEE OR SEARCH CLASS:
318, Electricity: Motive Power Systems, subclasses 543 through 557 for rheostats in combination with motors.
338, Electrical Resistors, subclass 50 for an electrical resistor mounted on wheels wherein the sole purpose of the wheel mounting is to make the resistor mobile, and subclasses 68-201 for mechanically variable electrical resistors, per se.
- 61.5 Gas turbine:**
This subclass is indented under subclass 26.05. Locomotive in which the motive power is furnished by a turbine driven by gaseous products of combustion.
- (1) Note. A device in which the only motive power for driving the locomotive furnished by the turbine is a jet of gas, e.g., turbojet, is not included in this definition.
- (2) Note. A turbine comprises a rotor driven by the kinetic energy of a fluid, as distinct from a rotor driven by positive displacement due to the action of fluid in an expansible chamber.
- SEE OR SEARCH THIS CLASS, SUBCLASS:
38, for a steam turbine-driven locomotive.
62, for locomotive power comprising an internal combustion or explosive engine other than a gas turbine.
- SEE OR SEARCH CLASS:
60, Power Plants, appropriate subclasses, especially subclasses 39.01 through 39.83 for power plants including gas turbines.
415, Rotary Kinetic Fluid Motors or Pumps, appropriate subclasses for a gas turbine, per se.
- 62.1 Internal combustion engine:**
This subclass is indented under subclass 26.05. Locomotive in which the prime mover is of the type having an enclosed chamber adapted to be filled with an explosive chemical combined with provision to bring about such explosion and utilize the power therefrom for motive power.

- SEE OR SEARCH THIS CLASS, SUB-CLASS:
 61.5, for a locomotive powered by an external combustion engine, other than a steam engine.
- 62.2 Water cooled engine:**
 This subclass is indented under subclass 62.1. Locomotive with provision to remove thermal energy from the prime mover by passage of water thereabout.
- 63 Pneumatic:**
 This subclass is indented under subclass 26.05. Locomotives in which a propelling force is derived from air pressure, either atmospheric or compressed.
- 64.1 With pump:**
 This subclass is indented under subclass 63. Locomotive combined with means to compress the pneumatic medium used for exerting the propelling force.
- (1) Note. A reversible pneumatic motor utilized to save the energy of momentum is included herein.
- SEE OR SEARCH CLASS:
 104, Railways, appropriate subclasses for a pneumatic railway vehicle combined with an external source of pressurized air.
 280, Land Vehicles, subclass 216 for fluid-type energy storing device for an occupant-propelled vehicle.
- 64.2 Jet propelled:**
 This subclass is indented under subclass 64.1. Locomotive wherein fluent material, e.g., gaseous material, etc., is cast into the atmosphere to yield a resultant driving force to the locomotive.
- 65 Storage:**
 This subclass is indented under subclass 63. Locomotives in which a propelling force is derived from compressed air, such air being carried in storage reservoirs on the locomotive and not including that type in which the air is compressed on the car.
- (1) Note. This subclass also relates to the general arrangement of air reservoirs on the locomotive.
- 66 Propeller:**
 This subclass is indented under subclass 26.05. Locomotives driven by wind or water wheels.
- 67 Spring:**
 This subclass is indented under subclass 26.05. Locomotives in which a propelling force is derived from a spring or springs.
- 68 Elliptic:**
 This subclass is indented under subclass 67. Locomotives in which the springs are of the elliptical or bow type.
- 69 Coil:**
 This subclass is indented under subclass 67. Locomotives in which the springs are of the coil or helical type acting under tension or compression only.
- 70 Torsion:**
 This subclass is indented under subclass 67. Locomotives in which the springs are of the torsion type, usually of coil or bar form.
- 71 Spiral:**
 This subclass is indented under subclass 67. Locomotives in which a propelling force is derived from a spring or springs of the spiral type.
- 72 Gravity:**
 This subclass is indented under subclass 67. Locomotives in which the weight of the car, acting by gravity, or a falling weight, operates through some agency, as gears or cams, to give motion to the car.
- 72.1 Inertia drive:**
 This subclass is indented under subclass 26.05. Locomotive including a mass adapted to be in motion with driving connection to propel the locomotive from the energy of motion stored therein.

72.2 With land engaging wheel:

This subclass is indented under subclass 26.05. Locomotive having a wheel for rolling along a rail, and having at least one wheel for riding on a planar surface of the earth.

- (1) Note. To be a locomotive, a railway vehicle must include provision to propel itself along a rail.
- (2) Note. A locomotive receiving part of its tractive or lading load from a wheel engaging the flat surface beside a rail is included herein.
- (3) Note. A locomotive including a single wheel particularly adapted to ride on a (1) rail or (2) planar surface of the earth is included in this subclass.
- (4) Note. A vehicle carrying wheel-substitute e.g., an endless belt, etc., is considered to be a "wheel" for placement in this subclass.

SEE OR SEARCH THIS CLASS, SUB-CLASS:

215.2, for a railway truck including both rail and highway engaging wheels, wherein there is no provision to propel itself along a rail.

73 Traction regulators:

This subclass is indented under subclass 26.05. Devices for increasing the tractive effect of a locomotive.

74 Airplane:

This subclass is indented under subclass 73. Rolling stock carries airplanes or inclined surfaces to regulate the load on the traction-wheels.

SEE OR SEARCH THIS CLASS, SUB-CLASS:

1.2, for streamline rolling stock with foil surfaces to lift the air.

75 Variable driver load:

This subclass is indented under subclass 73. Rolling stock in which the weight of the tender, locomotive-pilot, or trailing trucks may be

shifted to or from the locomotive drive-wheels to vary their tractive effect.

76 Electric:

This subclass is indented under subclass 73. Rolling stock which provides for the passage of electric current through the wheel and rail to increase the tractive effect.

77 Electromagnetic:

This subclass is indented under subclass 73. Rolling stock in which a magnetic field on the locomotive or roadbed causes increased adhesion between the wheels and rails.

78 Wheel or axle:

This subclass is indented under subclass 77. Apparatus in which the wheel and axle or the wheels alone form part of the electromagnet.

79 Inside drive boxes:

This subclass is indented under subclass 26.05. Locomotives having axle driving boxes located at the inner sides of the drive wheels for supporting the locomotive frame.

80 Lateral motion:

This subclass is indented under subclass 79. Axle driving boxes having means permitting lateral motion of the locomotive frame on the driving boxes.

81 Wedge adjustment:

This subclass is indented under subclass 79. Axle driving boxes having vertical guide wedges for lateral adjustment of the drive-boxes.

82 Equalizers:

This subclass is indented under subclass 26.05. Locomotives having means including interconnected links, levers, with or without springs, and pneumatic systems for equalizing the load distribution to the axles.

SEE OR SEARCH THIS CLASS, SUB-CLASS:

75, for means for varying the load on locomotive drivers.

194, for equalizers for bogies.

209, for equalizers for trucks.

- 84 Connecting rods:**
This subclass is indented under subclass 26.05. Connecting rods and pitmen for locomotive drive wheels.
- 85 Drive-wheel turners:**
This subclass is indented under subclass 26.05. Roundhouse appliances for turning locomotive drive wheels without moving the locomotive for the purpose of setting the valves.
- 86 TRACKMAN'S-CAR DRIVE:**
This subclass is indented under the class definition. Mechanism comprising manually or bodily operated driving means for hand-cars, railway velocipedes, and other trackman's car.
- SEE OR SEARCH THIS CLASS, SUBCLASS:
26.1, for trackman's-car-type vehicles are power propelled for transport.
- SEE OR SEARCH CLASS:
280, Land Vehicles, subclasses 200 through 304.5 for velocipedes of general utility.
- 87 Vertical hand lever:**
This subclass is indented under subclass 86. Manually operated railway vehicles in which a vertical hand-operated lever has driving connections with the wheels of the vehicle.
- 88 Horizontal hand lever:**
This subclass is indented under subclass 86. Manually operated railway vehicles having a horizontal hand-operated lever to drive the vehicle.
- 89 Hand crank:**
This subclass is indented under subclass 86. Vehicles driven by means of a hand crank.
- 90.1 Car pusher:**
This subclass is indented under subclass 89. Trackman's-car drive adapted to engage another railway car and move the same along a track.
- 90.2 Motorized:**
This subclass is indented under subclass 90.1. Trackman's car drive including a prime mover to power and urge the other piece of rolling stock to move.
- 91 Pedal crank:**
This subclass is indented under subclass 86. Railway vehicles, composed largely of the velocipede type of trackman's cars, which are operated by means of a pedal crank.
- 92 On axle:**
This subclass is indented under subclass 91. Railway vehicles having the pedal cranks located directly on the axle of the driving-wheels.
- 93 Treadle:**
This subclass is indented under subclass 86. Railway vehicles having treadle-operated driving means.
- 94 Rockable seat:**
This subclass is indented under subclass 86. Railway vehicles in which a rocking or sliding movement of the seat or seats is utilized to drive the vehicle.
- SEE OR SEARCH CLASS:
280, Land Vehicles, subclasses 220 through 229 for land vehicles operated in this way.
- 95 Bicycle conversion:**
This subclass is indented under subclass 86. Devices comprising attachments to an ordinary bicycle whereby it is rendered capable of running on an ordinary railroad track.
- 96 WHEEL OR AXLE DRIVE:**
This subclass is indented under the class definition. Wheel or axle drives for railway vehicles including both axles which are driven and those which act as a driver.
- SEE OR SEARCH CLASS:
180, Motor Vehicles, subclasses 337 through 385 for a motor vehicle having mechanism for connecting the power shaft to the road wheels.

96.1 Axle box mounted transmission:

This subclass is indented under subclass 96. Devices where the transmission is partially or wholly mounted in or on the usual journal box.

96.2 Fluid transmission:

This subclass is indented under subclass 96. Devices in which the drive is constituted wholly or partially of fluid means.

SEE OR SEARCH THIS CLASS, SUB-CLASS:

63 through 65, for pneumatic locomotive power plants.

97 Planetary:

This subclass is indented under subclass 96. Driving gear including at some point, as a speed-changing link therein, a planetary gear.

SEE OR SEARCH THIS CLASS, SUB-CLASS:

55, for electric power plants for locomotives having gearing and having the rotor on the axle.

98 Tandem drive:

This subclass is indented under subclass 96. Power transmitting devices on locomotives for driving and controlling a belt-gear or flexible-shaft drive along a train.

(1) Note. The direct axle-driving means of these drives are found in the subclasses below.

99 Articulated radial:

This subclass is indented under subclass 96. Power transmitting devices comprising driving connections from a locomotive to one or more axles having angular movement with respect to the locomotive or the axles having relative horizontal radial movement with respect to each other.

(1) Note. Other forms of articulated radial drive are found in the subclasses below.

100 Epicyclic drive wheels:

This subclass is indented under subclass 96. Driving connections in which a small inner drive wheel rests upon the inner rim of the

large external traction wheel and drives the latter.

101 Belt gear:

This subclass is indented under subclass 96. Driving devices in which the axle is directly driven by a belt gear.

SEE OR SEARCH CLASS:

474, Endless Belt Power Transmission Systems or Components, appropriate subclasses for an endless belt transmission.

102 To rotor:

This subclass is indented under subclass 101. Driving devices in which the belt gear on the axle passes around the rotor element of a motor or machine.

SEE OR SEARCH THIS CLASS, SUB-CLASS:

106, and 107, for swing and sliding motors, respectively, functioning as belt tighteners.

103 Double loop:

This subclass is indented under subclass 102. Driving devices in which the driving belt is looped twice around the axle and twice around the rotor.

(1) Note. These drives are for dynamos.

104 To crank shaft:

This subclass is indented under subclass 101. Driving devices in which the driving belt passes from the wheel or axle to a wheel on a crankshaft, or the last element of the gear train is a reciprocating engine.

105 Belt tightener:

This subclass is indented under subclass 96. Driving devices comprising special belt tighteners for axle drives.

SEE OR SEARCH CLASS:

474, Endless Belt Power Transmission Systems or Components, appropriate subclasses, particularly subclasses 101 through 138 for a belt tensioner.

- 106 Swinging motor:**
This subclass is indented under subclass 105. Belt tighteners comprising a motor or dynamo carried on swinging supports, so that the rotor-wheel can be shifted.
- 107 Sliding motor:**
This subclass is indented under subclass 105. Belt tighteners comprising a motor or dynamo slidably mounted to regulate the tension of the belt from the axle.
- 108 Plane gear:**
This subclass is indented under subclass 96. Driving devices having two gear wheels, either toothed or friction, in the same plane, one of the wheels being on the axle.
- 109 To bevel gear:**
This subclass is indented under subclass 108. Plane gears with the axle gear continuing the transmission in a bevel gear drive.
- 110 To belt:**
This subclass is indented under subclass 108. Plane gears with an extension transmission by belt gear.
- 111 To pitman and rotor:**
This subclass is indented under subclass 108. Plane gears with an extension transmission by a pitman.
- 112 Engaging traction wheel:**
This subclass is indented under subclass 108. Plane gears, frictional or toothed, which engage directly with the traction wheel.
- 113 To rotor:**
This subclass is indented under subclass 108. Plane gears in which the car wheel or axle gear engages directly with a rotor wheel of a rotary motor or dynamo.
- 114 Engaging traction wheel:**
This subclass is indented under subclass 113. Drive devices in which a traction wheel or rim integrally formed with or rigidly attached to the gear engages directly with a rotor wheel of a rotary motor or dynamo.
- 115 With crank shaft:**
This subclass is indented under subclass 108. Plane gears in which the car axle gear engages a train of gearing, which ends in a cranked shaft.
- 116 Engaging traction wheel:**
This subclass is indented under subclass 115. Drive devices in which the traction wheel is engaged directly by the plane gear.
- 117 Bevel gear:**
This subclass is indented under subclass 96. Drive devices in which the wheel or axle usually carries a bevel gear, which engages a corresponding gear on a shaft which is at an angle, usually a right angle, to the axle or car wheel.
- (1) Note. The gearing may be either frictional or toothed.
- 118 To rotor:**
This subclass is indented under subclass 117. Drive gearing in which the angle or bevel gear on the transverse shaft is the rotor wheel of the motor or dynamo.
- 119 Worm gear:**
This subclass is indented under subclass 96. Drive devices in which the car wheel or axle is driven directly by a worm gear.
- 120 Pitman to jack shaft:**
This subclass is indented under subclass 96. Drive devices in which a pitman passes from the cranked car wheel or axle to a parallel cranked jack shaft.
- 121 Geared:**
This subclass is indented under subclass 120. Drive devices in which the jack shaft has a gear wheel for the motor drive.
- 122 Pitman to rotor:**
This subclass is indented under subclass 96. Drive devices in which the cranked car wheel or axle is connected directly by a pitman, which in turn is connected directly to the rotor of a motor.

- 123 Pitman to level:**
This subclass is indented under subclass 96. Drive devices in which the pitman connects at one end to a cranked car wheel or axle and at the other end to a lever, which may be a bar lever or a lever of the bell crank and shaft type.
- 124 Pawl and ratchet:**
This subclass is indented under subclass 96. Railway vehicles in which the driving mechanism consists of a ratchet drawbar or pawl in combination with a ratchet wheel secured to the car wheel or axle.
- 125 Pawl on axle bracket:**
This subclass is indented under subclass 124. Pawl-and-ratchet-driven railway vehicles in which the pawl is mounted directly on the car axle or on a bracket or lever carried by the car axle.
- 126 Winding drum:**
This subclass is indented under subclass 125. Pawl-and-ratchet-driven railway vehicles in which the pawl-carrying bracket is accurate in form and is actuated by means of a rope or chain passing over the arcuate surface.
- 127 Rack and pinion:**
This subclass is indented under subclass 96. Railway vehicles in which the driving mechanism consists of a rack bar in combination with a car wheel or axle carried pinion.
- 128 One-way friction grip:**
This subclass is indented under subclass 96. Railway vehicles in which the car wheels or axles are provided with clutches, such as cam or rollers, holding by frictional contact when moved in one direction and adapted to move freely in the opposite direction.
- 129 Flange or axle grip tool:**
This subclass is indented under subclass 96. Car moving devices comprising levers with wheel rim or axle engaging jaws, or both, for moving cars by hand.
- 130 Clutches**
This subclass is indented under subclass 96. Driving devices comprising special forms of clutch mechanism in connection with wheel, axles, and motors.
- 131 Resilient drive:**
This subclass is indented under subclass 96. Driving devices which include yielding and spring driving connections between the motor and the traction wheels.
- SEE OR SEARCH CLASS:
464, Rotary Shafts, Gudgeons, Housings, and Flexible Couplings for Rotary Shafts, appropriate subclasses for a flexible coupling between a shaft and driven member.
- 132 Loose link:**
This subclass is indented under subclass 96. Driving devices which include loose-link driving connections between the motor and the traction wheels.
- 132.1 Torque arms:**
This subclass is indented under subclass 96. Driving devices having transmission gearing where the driving torque reactions are transmitted to the vehicle, truck frame, or adjacent axle by a resiliently or nonresiliently connected torque arm.
- 133 MOTOR PLACEMENT:**
This subclass is indented under the class definition. Devices relating to the location or base-fastening of a motor or dynamo on a car body or its truck.
- SEE OR SEARCH CLASS:
248, Supports, subclasses 637 through 681 for machinery supports in general.
- 134 Cable grip:**
This subclass is indented under subclass 133. Devices relating to modifications of a car body or its truck so that a cable gripper may be operatively supported thereon for use with a traction cable.
- 135 Opposing torque equalizer:**
This subclass is indented under subclass 133. Devices in which a plurality of pivotally mounted electric motors are interconnected, so that the motor torques oppose and neutralize each other.

- 136 Axle mounting:**
This subclass is indented under subclass 133. Devices which include special collars and sleeves for mounting motors on axles.
- 137 Stator casings:**
This subclass is indented under subclass 136. Devices which include modifications of the stator casings of electric motors to form bearings thereon for axle mounting.
- 138 Bar supports:**
This subclass is indented under subclass 133. Motor placement devices comprising bars or frames for supporting motors on trucks.
- SEE OR SEARCH THIS CLASS, SUBCLASS:
106, and 107, for swinging and sliding motors, respectively, functioning as belt tighteners.
- 139 With springs:**
This subclass is indented under subclass 138. Bars or frames with springs to yieldingly support the motor.
- SEE OR SEARCH THIS CLASS, SUBCLASS:
135, for plural motors pivotally mounted so that their torques are opposed.
- 140 Boxings and casings:**
This subclass is indented under subclass 133. Motor placement devices comprising boxes, crates, and castings for enclosing and supporting motors or dynamos on trucks.
- 141 MONORAIL:**
This subclass is indented under the class definition. Railway rolling stock adapted to run on and above a single rail, so that the center of gravity of the vehicles is above the rail.
- (1) Note. Two rails so close together as to leave merely a wheel-flange way between them are classed as monorails.
- 142 Human balance:**
This subclass is indented under subclass 141. Monorail vehicles in which the rider balances the moving vehicle by his body movement.
- 143 Animal draft:**
This subclass is indented under subclass 141. Monorail vehicles in which a draft animal or human being keeps the car balanced upon and moves it along the track.
- 144 With slide guides:**
This subclass is indented under subclass 141. Monorail vehicles in which the vehicle balance is maintained by side wheels or contact members engaging auxiliary side rails or ways.
- SEE OR SEARCH CLASS:
104, Railways, subclass 119 for monorail tracks and tracks and vehicles combined.
- 145 Raised center rail:**
This subclass is indented under subclass 144. Monorail vehicles adapted to tracks in which the center or monorail is raised above the level of the side tracks.
- 146 Overhead guides:**
This subclass is indented under subclass 141. Monorail vehicles adapted to tracks which include a monorail beneath the cars and separated guide rails above the cars.
- 147 Single top guide**
This subclass is indented under subclass 141. Monorail vehicles adapted to tracks which include a single rail beneath the cars and a single guide rail above the same.
- 148 SUSPENDED:**
This subclass is indented under the class definition. Railway rolling stock comprising vehicles suspended from trolleys, which run on elevated tracks.
- 149 Car leveler:**
This subclass is indented under subclass 148. Devices for maintaining a car body horizontal regardless of whether the body-supporting trolleys are running on a horizontal, inclined, or catenary track.
- 149.1 Passenger car (e.g., for skiing, etc.):**
This subclass is indented under subclass 148. Passenger car including a portion of particular utility to the transportation of people located below the support structure.

149.2 Suspended chair:

This subclass is indented under subclass 149.1. Passenger car comprising an unenclosed seat.

- (1) Note. The chair of this subclass may include such accessories as a safety rail and a footrest.

150 Single rail:

This subclass is indented under subclass 148. Suspended vehicles designed to travel on a single elevated rigid or cable track.

SEE OR SEARCH CLASS:

- 16, Miscellaneous Hardware, subclass 87 for panel hangers and travelers.

151 Cable retainers:

This subclass is indented under subclass 150. Suspended vehicles having shiftable latches and guards for preventing a trolley from being derailed or jumping from its track.

152 Equalized trolleys:

This subclass is indented under subclass 150. Multiple-wheeled suspended vehicle trolleys so connected to their load as to insure a uniform load distribution to the several trolley wheels.

153 Under rolls:

This subclass is indented under subclass 150. Suspended vehicles in which the trolleys have an auxiliary set of wheels or rollers adapted to engage the underside of the elevated rail.

154 Inner wheels:

This subclass is indented under subclass 148. Suspended vehicles in which the trolleys are provided with inwardly projecting traction wheels designed to travel on a separated pair of rails or on a single middle rail having two separate wheel tread surfaces.

155 Outer wheels:

This subclass is indented under subclass 148. Suspended vehicles in which the trolleys have outwardly projecting traction wheels for travel on separated rail tread surfaces, and the vehicle suspension means travel between said tread surfaces.

156 Vertical swivels:

This subclass is indented under subclass 148. Suspended vehicles having swiveling devices for the suspension hangers between the trolleys and car bodies or load carriers.

157.1 TRUCKS:

This subclass is indented under the class definition. Rolling stock comprising an assembly of a pair of wheels and supporting framework to carry a distinct vehicle body.

157.2 Toy or model truck:

This subclass is indented under subclass 157.1. Truck intended for entertainment, or of inadequate size to be used for transportation of people and not intended for transportation of produce.

- (1) Note. A model truck, even though structurally identical to a conventional truck is included in this subclass, since it is not for transportation of people or produce.

158.1 Modified car:

This subclass is indented under subclass 157.1. Truck adapted to support a distinct vehicle of a shape specially chosen for interfitting with that truck.

SEE OR SEARCH THIS CLASS, SUBCLASS:

- 4.1 through 4.4, for a two-car truck for an articulated train.

158.2 With spring for low floor car:

This subclass is indented under subclass 158.1. Truck combined with resilient means to support the vehicle with respect thereto, to support a vehicle having a load surface that is physically lower than is usual for a car of the particular type.

SEE OR SEARCH THIS CLASS, SUBCLASS:

- 4.1 through 4.4, for trucks designed to support two adjacent car bodies in an articulated train.

159 Vehicle carrying:

This subclass is indented under subclass 157.1. Floorless trucks designed to carry other vehicles, such as loaded wagons.

SEE OR SEARCH CLASS:

410, Freight Accommodation on Freight Carrier, subclass 53 for paired trucks, spaced apart to support each of the end of a loaded semitrailer for transporting off the ground.

160 Bunk:

This subclass is indented under subclass 157.1. Logging trucks in which the log supports are transverse beams or bolsters termed "log-bunks".

160.5 Lumber:

This subclass is indented under subclass 157.1. Trucks for handling lumber, conveying it to drying kilns, etc.

161 Mining machine:

This subclass is indented under subclass 157.1. Trucks designed to receive and transport mining machines and to serve as base supports for such machines when in operation.

162 Trackman's car:

This subclass is indented under subclass 157.1. Trucks comprising structural features and attachments to trackman's cars.

SEE OR SEARCH THIS CLASS, SUBCLASS:

86 through 95, for trackman's car drive.

163.1 Overhead crane:

This subclass is indented under subclass 157.1. Truck particularly adapted to support and carry a dragline or other lifting structure of a type adapted to travel on a rail vertically higher than material carried thereby.

SEE OR SEARCH THIS CLASS, SUBCLASS:

29.1, for a locomotive of the rack rail type.
96 through 132.1, for a wheel or axle drive for railway rolling stock, generally.

SEE OR SEARCH CLASS:

212, Traversing Hoists, appropriate subclasses for traveling bridge cranes having a hoisting trolley thereon. Hoisting means or structure peculiar

thereto must be claimed for original placement in Class 212.

163.2 Skew control:

This subclass is indented under subclass 163.1. Truck having a wheel for rolling over each of a pair of rails and having provision to regulate the amount of travel of one wheel with respect to the other wheel.

164 Levelers:

This subclass is indented under subclass 157.1. Devices for leveling up and temporarily fixing the positions of truck platforms.

SEE OR SEARCH CLASS:

280, Land Vehicles, subclasses 6.15 through 6.16 for a land vehicle of general utility including means, interposed between the vehicle body, chassis, or frame and running gear thereof, for altering height or levelness of the vehicle body, chassis, or frame; and subclasses 43-43.24 for a land vehicle of general utility having vertically adjustable wheels for altering a dimension of the vehicle or a part thereof.

165 Radial :

This subclass is indented under subclass 157.1. Trucks having a plurality of axles so mounted as to allow each to take a position on a curved track substantially radial to the curve.

166 Six-wheel:

This subclass is indented under subclass 165. Trucks having six wheels.

167 Bogie:

This subclass is indented under subclass 165. Trucks of the four-wheeled swiveled type with axles which may radiate relatively to curved tracks.

168 Positive control:

This subclass is indented under subclass 167. Trucks having a connection such that the swiveling of the truck relative to the body operates positively to place each axle in substantially radial position to the track.

- 169 Stub axle:**
This subclass is indented under subclass 165. Trucks wherein each wheel has its independent axle.
- 170 Caster-wheel type:**
This subclass is indented under subclass 165. Trucks wherein each wheel is swiveled and follows a curved track by swiveling on a vertical axis which intersects the contact point of the wheel and rail.
- 171 Lateral motion:**
This subclass is indented under subclass 157.1. Trucks connected to the car body so as to permit of lateral movement relative to the car body.
- SEE OR SEARCH THIS CLASS, SUB-CLASS:
174, for locomotive trucks capable of lateral motion relative to the locomotive frame.
185 through 193, for lateral motion bolsters.
- 172 Locomotive frames:**
This subclass is indented under subclass 157.1. Truck frame structure useful only for locomotives.
- 173 Buffer beams:**
This subclass is indented under subclass 172. Locomotive frames having end buffers or pilot beams.
- 174 Swinging bogie:**
This subclass is indented under subclass 172. Locomotive frames in which the front or trailing truck, comprising one or more wheeled axles and a frame connection, is mounted so that the truck is capable of lateral movement relative to the locomotive frame.
- SEE OR SEARCH THIS CLASS, SUB-CLASS:
82, for equalizer connections.
189, for shifting center plates.
222, for shifting axle boxes.
- 175.1 Articulated:**
This subclass is indented under subclass 172. Locomotive truck with relatively movable truck and frame parts to render the rolling stock supported thereby flexible for rounding a turn on the supporting rails.
- (1) Note. The truck of this subclass may include three (or more) wheels wherein one wheel may be displaced laterally for rounding a turn.
- (2) Note. Included herein is a truck of a car including plural trucks interrelated with provision to allow for rounding of a turn.
- SEE OR SEARCH THIS CLASS, SUB-CLASS:
3 through 4.4, for a plurality of railway cars flexibly coupled in such a way as to appear to be a single unit.
- 176 Interconnected:**
This subclass is indented under subclass 157.1. Railway trucks provided with means so connecting the running-gear units that motion of one with relation to the vehicle causes motion of another with relation to the vehicle.
- 177 Multidirectional:**
This subclass is indented under subclass 157.1. Trucks provided with a plurality of sets of supporting wheels, each set adapted for running in a different angular direction.
- 178 Changeable gauge:**
This subclass is indented under subclass 157.1. Trucks modified so as to run on tracks of different gauges.
- 179 Vertical side pivot:**
This subclass is indented under subclass 157.1. Trucks wherein the sides are individually pivoted by vertical pivots through the transom or bolster ends.
- 180 Stub axle:**
This subclass is indented under subclass 157.1. Trucks wherein each wheel has its independent axle.
- (1) Note. Where the axle-sections are so connected across the truck (as by a

sleeve) as to require no change in frame structure over that required to support a single axle with two wheels, the patent is not classified here.

181 Antifriction wheels:

This subclass is indented under subclass 157.1. Antifriction-wheels to carry the frame on the supporting wheels or axles.

- (1) Note. The presence of mere rollers or ball bearings in the journal boxes does not bring the patent to this subclass.

182.1 Bogie:

This subclass is indented under subclass 157.1. Truck constructed for connection to the vehicle body with capability of swivel motion as a unit with relating thereto.

183 Eight-wheel:

This subclass is indented under subclass 182.1. Bogies comprising eight-wheeled trucks.

184 Maximum traction:

This subclass is indented under subclass 182.1. Bogies constructed so as to throw the weight of the vehicle largely on a single pair of driving wheels of each truck, the remaining wheels serving mainly to guide the truck along the track.

185 Lateral-motion bolster:

This subclass is indented under subclass 182.1. Bogies provided with a cross-beam or bolster mounted so as to allow it limited bodily action laterally of the truck.

186 Roller:

This subclass is indented under subclass 185. Bogies having the bolster or spring seat mounted on rollers for lateral movement.

187 Rocker:

This subclass is indented under subclass 185. Bogies in which the bolster is mounted on rockers or the spring seat rocks.

188 Six-wheel:

This subclass is indented under subclass 185. Bogies having six-wheel trucks.

189 Center plate:

This subclass is indented under subclass 185. Bogies having a short bolster member which is a mere center-bearing or swivel-connection plate to support the vehicle body.

190.1 Swinging:

This subclass is indented under subclass 185. Bogie including a side frame along each lateral side thereof, a link member pivotally attached to each side frame, and a body supporting bolster pivotally attached to each link and extending from the link of one side frame to the link of the other, with load transmitted from the bolster by tension only being applied to the links, allowing the bolster to move laterally with respect to the side frames.

SEE OR SEARCH THIS CLASS, SUBCLASS:

189, for a bogie having a lateral-motion bolster and a mere center bearing to support a vehicle body.

190.2 Sprung or cushioned bolster:

This subclass is indented under subclass 190.1. Bogie including resilient means to transmit load or means to limit vibration from the bolster to each side frame.

191 On column guide:

This subclass is indented under subclass 190.1. Bolster-hangers mounted on the column-guides in the truck side frame.

192 Span supported:

This subclass is indented under subclass 185. Bolster supported from the truck side frames at substantial distances from its side.

193 Bolster damper:

This subclass is indented under subclass 185. Devices comprising attachments specially adapted to check or cushion the lateral motion of truck-bolsters.

SEE OR SEARCH CLASS:

188, Brakes, subclasses 297 through 320 for a fluid-resistance dashpot of general utility.

194 Equalizers:

This subclass is indented under subclass 182.1. Bogies provided with means for transmitting weight from the truck frames to the axle boxes in substantially equal proportions regardless of inequalities in the level of the track.

SEE OR SEARCH THIS CLASS, SUB-CLASS:

209, for truck equalizers.

210, for parallel depression body supporting means.

195 Six-wheel:

This subclass is indented under subclass 194. Bogies provided with six supporting-wheels.

SEE OR SEARCH THIS CLASS, SUB-CLASS:

166, for six-wheel radial trucks.

188, for six-wheel bogies with lateral-motion bolster.

196 Six-wheel:

This subclass is indented under subclass 182.1. Bogies provided with six supporting wheels.

SEE OR SEARCH THIS CLASS, SUB-CLASS:

188, for six-wheel bogies with lateral motion bolster.

195, for six-wheel bogies with equalizing load-carrying means.

197.05 Sprung bolster:

This subclass is indented under subclass 182.1. Bogie including a wheel-supported side frame structure extending parallel to a first rail over which the device is to travel, a resilient member supported thereby, and a rigid cross-member supported by the resilient member, said cross-member extending to a corresponding wheel supported side frame riding on a second rail parallel to the first.

SEE OR SEARCH CLASS:

267, Spring Devices, subclasses 6 through 7 for a spring device, per se, especially adapted for a vehicle bolster.

197.1 Leaf and coil:

This subclass is indented under subclass 197.05. Sprung bolster bogies where the spring assembly includes leaf and coil springs in series, parallel, series-parallel, or other relation.

197.2 Spring plankless:

This subclass is indented under subclass 197.05. Sprung bolster bogies where some provision between bolster and side frame connections is made to compensate for omission of the conventional spring plank.

198 Rocking:

This subclass is indented under subclass 197.05. Sprung bolster bogies in which the bolster is so mounted as to allow it to rock in a longitudinal vertical plane with relation to the truck-frame.

SEE OR SEARCH THIS CLASS, SUB-CLASS:

203, for similar mounting of a combined transom and bolster.

198.1 Pneumatic spring:

This subclass is indented under subclass 197.05. Bogie wherein the resilient member comprises a vessel filled with compressible gas.

SEE OR SEARCH CLASS:

267, Spring Devices, subclasses 64.11 through 64.28 for vehicle fluid springs in general.

198.2 Bolster movement dampened by snubber:

This subclass is indented under subclass 197.05. Bogie including provision to resistingly control free movement of the cross-member with respect to the frame.

(1) Note. A snubber is similar in function to a shock absorber.

SEE OR SEARCH CLASS:

267, Spring Devices, subclasses 195 through 227 for a railway truck snubber, per se, which comprises a mechanical spring combined with a fluid or friction motion retarder.

198.3 Hydraulic damping:

This subclass is indented under subclass 198.2. Bogie including a chamber filled with liquid having provision to transfer the liquid from one location to another, utilizing the viscosity of the liquid to restrict free movement of the cross-member with respect to the frame.

- (1) Note. A telescoping “shock absorber” is considered to be a hydraulic snubber in the absence of other disclosure.

SEE OR SEARCH CLASS:

267, Spring Devices, subclasses 217 through 227 for a railway truck snubber, per se, which comprises a mechanical spring combined with a fluid damper.

198.4 Snubber biasing spring also supports bolster:

This subclass is indented under subclass 198.2. Bogie including a resilient member to urge the snubber into frictional engagement with a cooperating friction surface, wherein the resilient member urging the snubber is positioned such that it also acts to support the cross-over bolster directly.

198.5 Bolster-mounted snubber:

This subclass is indented under subclass 198.2. Bogie wherein the provision to resistingly control free movement of the cross-member comprises structure mounted on the cross-member.

- (1) Note. In order to control movement of the bolster with respect to the frame, there must be engagement of both those parts. The snubber of this subclass includes significant structure fixedly attached to the bolster, i.e., more than a specific friction surface.

198.6 Linear torsion spring:

This subclass is indented under subclass 197.05. Bogie wherein the resilient member includes a generally straight, elongated portion adapted to twist within its elastic limit to yieldably support the cross-member.

- (1) Note. A coil spring, though supporting a load by torsion, is not included in this subclass.

198.7 Nonmetallic spring or cushion:

This subclass is indented under subclass 197.05. Bogie wherein the resilient member is made of material other than metal, and may include an additional resilient member, such that the nonmetallic member only absorbs relatively small oscillations.

199.1 Body connections:

This subclass is indented under subclass 182.1. Bogie including claimed detail of the structure for attachment thereof to a vehicle body supported thereby.

199.2 Anti-roll device:

This subclass is indented under subclass 199.1. Bogie including provision to counter movement of the supported vehicle body with respect to the bogie about an axis parallel to the supporting rail, or to allow or cause the vehicle body to lean away from the direction of centrifugal force.

- (1) Note. A truck side bearing is not considered to “counter movement” for this subclass.

SEE OR SEARCH THIS CLASS, SUBCLASS:

199.3, for a bogie having a truck side bearing.

199.3 Truck side bearing:

This subclass is indented under subclass 199.1. Bogie also including means remote from the center of the bogie to assist in carrying the weight of the supported vehicle body.

199.4 Truck center bearing:

This subclass is indented under subclass 199.1. Bogie including a support surface at the upper center thereof for pivotally carrying the weight of the supported vehicle body.

199.5 Single axle:

This subclass is indented under subclass 199.1. Bogie including a frame supported by only one wheel riding on each supporting rail and all wheels thereof riding on a common axle.

200 Bolster connections :

This subclass is indented under subclass 182.1. Bogies including the connections between (the truck bolster and truck and connections between) truck and body bolsters, but not including side and center bearings.

SEE OR SEARCH CLASS:

384, Bearings, subclass 586 for side and center antifriction bearings.

201 Lateral motion:

This subclass is indented under subclass 200. Bolster connections provided with means between the truck bolster and vehicle bolster allowing bodily lateral motion of the truck with relation to the car body in addition to the relative swivel motion.

SEE OR SEARCH THIS CLASS, SUB-CLASS:

171, for lateral motion connections between the car body and truck.

185, for lateral motion connection between the bolster and truck.

202 Combined transom and bolster:

This subclass is indented under subclass 182.1. Bogies wherein the cross-framing at the center of the truck carries a center bearing rigid therewith, thus performing the functions of both transom and bolster.

203 Rocking:

This subclass is indented under subclass 202. Combined transom and bolster bogies provided with a joint between the side and cross frames, allowing a relative rocking motion in a vertical plane longitudinally of the truck.

SEE OR SEARCH THIS CLASS, SUB-CLASS:

198, for rocking spring bolsters.

204 Arch-bar type:

This subclass is indented under subclass 182.1. Bogies having side frames of the arch-bar type, each comprising a truss structure mounting journal boxes at its ends, the bolster guides forming a double strut between the tension and compression members at the center.

205 Integral:

This subclass is indented under subclass 204. Arch-bar type bogies having the arch-bar and the longitudinal compression member integral.

206.1 Side frames:

This subclass is indented under subclass 182.1. Bogies having structure supported directly by the wheel axle, which structure extends predominately parallel with the wheel supporting rail.

SEE OR SEARCH THIS CLASS, SUB-CLASS:

202, for combined transom and bolster-type framing.

206.2 Welded:

This subclass is indented under subclass 206.1. Bogie including components that have been united by fusion bonding.

207 Bolster guides:

This subclass is indented under subclass 182.1. Bogies including guide columns for bolster ends in side frames.

SEE OR SEARCH THIS CLASS, SUB-CLASS:

204, for arch-bar-type bogies.

208 Spring planks and transoms:

This subclass is indented under subclass 182.1. Bogies including structure of the cross-tie members between the side frames adjacent the bolster, exclusive of bolster structure, together with their means of attachment to the side frames.

SEE OR SEARCH THIS CLASS, SUB-CLASS:

204, for arch-bar-type bogies.

208.1 Resiliently mounted transoms:

This subclass is indented under subclass 208. Bogies in which the transoms are resiliently mounted on the side frames.

208.2 Vertically flexible spring plank or loose connections:

This subclass is indented under subclass 208. Bogies specific to spring plank structure which permit relative vertical and/or tilting movement

between opposite truck side frames without straining the spring plank and its connection to the respective side frames.

SEE OR SEARCH THIS CLASS, SUB-CLASS:

179, for trucks with vertical side pivots.

209 **Equalizers:**

This subclass is indented under subclass 157.1. Trucks having means for transmitting load from the truck frame to the axles in substantially equal proportions regardless of inequalities in the track level.

SEE OR SEARCH THIS CLASS, SUB-CLASS:

194 through 195, for bogie truck equalizers.

SEE OR SEARCH CLASS:

280, Land Vehicles, subclasses 5.5 through 5.524 for a land vehicle of general utility including an active suspension system responsive to a force encountered while the vehicle is undergoing surface traversing motion to modify a suspension elasticity parameter; subclasses 6.15-6.16, especially subclasses 6.157-6.16 for a land vehicle of general utility including means, interposed between the vehicle body, chassis, or frame and running gear thereof, for altering height or levelness of the vehicle body, chassis, or frame; subclasses 81.1-81.6 for land vehicles of general utility including plural sets of supporting wheels, the wheels of each set being so mounted as to constitute a substantially complete running gear unit; or subclasses 104-687 for a land vehicle of general utility including means for transmitting weight to wheels on different axles in substantially equal proportions regardless of inequalities of the level of the travelled surface.

210 **Parallel depression:**

This subclass is indented under subclass 157.1. Trucks having means for maintaining the vehicle body substantially parallel with the track even under the weight of an eccentrically disposed load.

SEE OR SEARCH CLASS:

280, Land Vehicles, subclasses 5.5 through 5.524 for a land vehicle of general utility including an active suspension system responsive to a force encountered while the vehicle is undergoing surface traversing motion to modify a suspension elasticity parameter; or subclasses 6.15-6.16, especially subclasses 6.157-6.16 for a land vehicle of general utility including means, interposed between the vehicle body, chassis, or frame and running gear thereof, for altering height or levelness of the vehicle body, chassis, or frame.

211 **Platform:**

This subclass is indented under subclass 157.1. Trucks having a top platform or frame designed to receive the underframe of a car body or a load.

212 **Spring:**

This subclass is indented under subclass 211. Trucks having a spring-supported platform or side-bar top to receive the sills or underframe of a car body directly.

213 **Side-frame base:**

This subclass is indented under subclass 212. Trucks with axle box frames attached to a side frame, which supports the springs for the platform.

SEE OR SEARCH THIS CLASS, SUB-CLASS:

210, for parallel depression-type trucks.

214 **Integral U-yoke:**

This subclass is indented under subclass 213. Trucks having the side-frame bar integrally formed with inverted U-yokes, which guide the axle boxes.

SEE OR SEARCH THIS CLASS, SUB-CLASS:

192, for span-supported lateral motion bolsters.

215.1 Supplemental wheel:

This subclass is indented under subclass 157.1. Truck having a wheel intended to be in an inoperative position during some vehicular uses of the truck and to be in an operative position during other uses of the truck.

- (1) Note. Included herein is (1) a truck for use alternately as a land vehicle or as a railroad vehicle; and (2) a truck having a wheel that does not touch the rail under light loading, but settles down and rides on the rail under heavy loading.
- (2) Note. A vehicle-carrying wheel-substitution device; e.g., an endless belt, etc., is considered to be a "wheel" for placement in this subclass.

SEE OR SEARCH CLASS:

- 410, Freight Accommodation on Freight Carrier, subclass 67 for a freight carrying vehicle which may have supplemental guidance wheels cooperating with a track mounted on a freight car floor. The stowed vehicle may be a semitrailer proper for that subclass (rather than subclasses 56-65 for semitrailer stowage on a freight carrier), as explained in subclass 67 note for the line between these subclasses.

215.2 Railway/highway truck:

This subclass is indented under subclass 215.1. Truck for including wheel means for riding on a rail and including wheel means for riding on a planar surface generally.

- (1) Note. A truck including a single wheel particularly adapted to ride on a (1) rail or (2) planar surface is included in this subclass.
- (2) Note. The railway wheel may ride on a rail at the same time that the other wheel rides on a planar surface.
- (3) Note. The planar surface engaging wheel of this subclass may be driven.

SEE OR SEARCH THIS CLASS, SUB-CLASS:

- 72.2, for a locomotive including a land engaging wheel and a rail engaging wheel wherein the rail engaging wheel is driven, or wherein the land engaging wheel is driven to propel the locomotive along the rail.

216 Supplemental skids:

This subclass is indented under subclass 157.1. Trucks having supporting shoes or runner members arranged to slide along the track in case of truck derailment.

217 Safety supports:

This subclass is indented under subclass 157.1. Trucks having means to support parts of truck in case of breakage thereof to prevent them from interfering with the movement of the vehicle.

SEE OR SEARCH THIS CLASS, SUB-CLASS:

- 199.1, for body and truck connecting means.
- 200, for bolster connections to trucks and to body bolsters.

218.1 Axle bearing mounting:

This subclass is indented under subclass 157.1. Truck including claimed details of the mounting of the bearing supporting a frame on a wheel axle.

218.2 Axle bearing mounted on pivotal sideframe arms:

This subclass is indented under subclass 218.1. Truck wherein the side frame includes a support member movable about an axis to and from supporting position with respect to the axle box.

219 Permanent fixture:

This subclass is indented under subclass 218.1. Axle box mountings wherein some part of or the whole axle box is fixed to the truck side frame, either integrally, by welding, or by casting.

220 Detachable fixture:

This subclass is indented under subclass 218.1. Axle box mountings in which the axle box is secured at its top or side, or both, to the truck

- frame by bolts or lugs, so that it may be readily detached from the frame.
- SEE OR SEARCH THIS CLASS, SUB-CLASS:
219, for axle boxes permanently fixed to the truck side frame.
- 221.1 Releasable enclosure:**
This subclass is indented under subclass 218.1. Truck having an axle bearing mounting wherein the axle bearing is attached to the truck frame by an enclosing or surrounding means, which enclosing or surrounding means has one or more detachable parts to permit removal of the axle bearing.
- 221.2 Key release:**
This subclass is indented under subclass 221.1. Truck including a frame having an open bottom slot for receiving the axle and including a slot blocking member for attachment to only one side of the a slot to retain the axle in the slot.
- 222 Longitudinally movable:**
This subclass is indented under subclass 218.1. Axle box mountings having the axle box or bearing designed to have movement transversely of the truck frame.
- SEE OR SEARCH THIS CLASS, SUB-CLASS:
80, for lateral motion inside drive boxes for locomotives.
- 223 Rocking:**
This subclass is indented under subclass 218.1. Axle box mountings in which the connections are such that the axle journal may have lateral, vertical, or universal rocking movement relatively to the truck frame.
- SEE OR SEARCH THIS CLASS, SUB-CLASS:
169, for stub axle mountings in radial trucks.
- 224.05 Spring and guide:**
This subclass is indented under subclass 218.1. Truck including a way for movement of the axle and its immediate bearing structure with respect to the supporting frame and including a spring for yieldably transmitting load from the axle to the frame.
- 224.06 Spring biased guide or guide follower:**
This subclass is indented under subclass 224.05. Truck including a walled way, wherein the wall is resiliently urged to narrow the way or wherein the member directed by the wall to thereby restrict the way.
- (1) Note. The spring-biased guide or guide follower of this subclass may comprise a buffer, i.e., a shock absorber.
- 224.1 Deformable cushions:**
This subclass is indented under subclass 218.1. Axle box mounting of rubber or other similar nonmetallic material.
- 225 Wear plates:**
This subclass is indented under subclass 218.1. Axle box mountings having wear plates in the truck pedestals, against which the axle boxes rub.
- 226 Bolster:**
This subclass is indented under subclass 157.1. Truck construction involving transverse supporting beams between trucks and car bodies, usually termed "truck" and "body" bolsters.
- 227 Double:**
This subclass is indented under subclass 226. Twin beam or frame bolsters for four-wheeled trucks.
- SEE OR SEARCH THIS CLASS, SUB-CLASS:
188, 195, and 196, for frame bolsters for six-wheeled trucks.
- 228 Center-sill connection:**
This subclass is indented under subclass 226. Body bolsters on car under frames in which the center sills are framed into the bolsters or the bolsters are substantially modified to accommodate the center sills.
- 229 Trussed:**
This subclass is indented under subclass 226. Bolsters having tie and compression members separated in part from each other.

- 230 Cast:**
This subclass is indented under subclass 226. Bolsters made by casting.
- 231 TENDER:**
This subclass is indented under the class definition. Supply vehicles for carrying fuel, water, and other supplies for locomotives.
- 232 Coal feed:**
This subclass is indented under subclass 231. Tenders having means for aiding the fireman in supplying coal to the furnace.
- SEE OR SEARCH CLASS:
110, Furnaces, subclasses 101 through 118, particularly subclasses 105.5 and 105.6 for locomotive stokers, per se.
198, Conveyors: Power-Driven, appropriate subclasses for conveyors of particular types, including reciprocating and screw-type conveyors often used for feeding bulk material to furnaces.
- 233 Reciprocatory plunger:**
This subclass is indented under subclass 232. Coal-feeding tenders having reciprocating pushers for moving coal so as to facilitate the work of the fireman.
- 234 Screw:**
This subclass is indented under subclass 232. Coal-feeding tenders having screw or helical devices for moving the coal forward in a tender.
- 235 Tilting pan:**
This subclass is indented under subclass 232. Coal-feeding tenders having a tilting pan which is raised at its rear end to cause the fuel thereon to slide forward in the vicinity of the fireman.
- 236 Tanks:**
This subclass is indented under subclass 231. Tenders having tanks for carrying oil or water on a tender.
- 237 Coal bin:**
This subclass is indented under subclass 231. Tender constructions involving coal bin arrangements and gate control.
- 238.1 SPECIAL CAR BODIES:**
This subclass is indented under the class definition. Railway rolling stock comprising car bodies designed for special purposes and appurtenances special thereto.
- 238.2 Toy or model railway car:**
This subclass is indented under subclass 238.1. Special car body intended for entertainment or of inadequate size to be used for transportation of people, and not intended to be used for transportation of produce.
- (1) Note. A model car, even though structurally identical to a conventional railway car, is included in this subclass, since it is not for transportation of people or produce.
- 239 Dumping:**
This subclass is indented under subclass 238.1. Car bodies adapted to throw out their load or permit it to fall out by gravity.
- SEE OR SEARCH CLASS:
222, Dispensing, appropriate subclasses for dispensing in general, and see the notes thereto.
298, Land Vehicles: Dumping, appropriate subclasses for land vehicle dumping bodies.
414, Material or Article Handling, subclasses 333 through 402 for the loading or unloading of a wheeled (except subclass 373) load-transporting-type vehicle, e.g., a railway vehicle, etc., wherein means external to the vehicle is involved.
- 240 Motor-operated doors:**
This subclass is indented under subclass 239. Dumping bodies having motor operated dumping doors.
- 241.1 Moving car dump:**
This subclass is indented under subclass 239. Dumping bodies in which the dumping operation is controlled by and concurrent with the movement of the car.

241.2 Actuated by means external to car:

This subclass is indented under subclass 241.1. Dumping bodies comprising means to cooperate with an externally located, e.g., trackside, etc., device for carrying out the dumping operation.

SEE OR SEARCH CLASS:

414, Material or Article Handling, subclasses 383 through 384 for the combination of a load-transporting vehicle and means external thereto cooperating in the loading or unloading thereof, and wherein the vehicle is in motion and the means reorients the vehicle load body into an attitude whereby the load departs by gravity; and subclasses 387-388 for an arrangement differing from that of subclass 383 only in that, instead of the body being reoriented, a body component, e.g., gate, etc., is relocated.

242 Suspended:

This subclass is indented under subclass 239. Dumping vehicles having supporting trolleys designed to travel on an overhead track or cable.

243 Convertible flat and hopper bottom:

This subclass is indented under subclass 239. Cars designed to be converted at will from a box or gondola car to a hopper bottom dumping car.

244 Gondola drop bottom:

This subclass is indented under subclass 239. Gondola cars having drop doors in its bottom between the center sills and side walls.

SEE OR SEARCH THIS CLASS, SUBCLASS:

280 through 285, for dumping door constructions which may include so much of car construction as is necessary to mount the door.
286 through 307, for dumping door actuators which may include as much of the car as is necessary to mount the actuator.

245 Central ridge:

This subclass is indented under subclass 244. Gondola cars having a permanent inverted-V ridge placed over the center sills to prevent retention of the lading thereon after dumping.

246 Rising ridge:

This subclass is indented under subclass 244. Gondola cars in which the self-cleaning ridge rises in the act of dumping and falls again when the doors are closed.

247 Hopper type:

This subclass is indented under subclass 239. Lading receptacles having an interior form such as to be self-clearing by gravity when the bottom doors are opened.

248 Multiple hopper:

This subclass is indented under subclass 247. Lading receptacles in which the car bottom has a plurality of funnel-shaped outlets longitudinally arranged.

249 Facing center chute:

This subclass is indented under subclass 248. Lading receptacles, in which the downwardly inclined end walls converge toward the car-center, where they form two or more chutes, which discharge the lading longitudinally toward each other.

SEE OR SEARCH THIS CLASS, SUBCLASS:

256, for inclined bottom side-spout gondolas.

250 Longitudinal doors:

This subclass is indented under subclass 247. Hopper-type cars having drop-bottom doors arranged to swing about axes longitudinally of the car or slide transversely of the car.

251 Center-sill separator:

This subclass is indented under subclass 250. Hopper-type cars in which the hopper outlet is divided centrally and longitudinally by a center sill or door pivot means.

SEE OR SEARCH THIS CLASS, SUBCLASS:

244 through 246, for gondola drop-bottom cars.

- 252 Side-chute bridge**
This subclass is indented under subclass 250. Hopper-type cars having the longitudinal hopper doors pivoted adjacent the center sill, their outer edges dropping to contact with stationary side chutes or aprons for conducting the lading to the side of the way.
- 253 Transverse doors:**
This subclass is indented under subclass 247. Hopper-type cars having the outlet doors at the base of the hopper swinging about axes running transversely of the car or sliding longitudinally of the car.
- SEE OR SEARCH THIS CLASS, SUBCLASS:
248, for multiple-hopper constructions.
- 254 Inclined bottom:**
This subclass is indented under subclass 239. Dumping car bodies in which the car bottom has such an inclination that upon the release of a side door the entire lading is discharged by gravity.
- 255 Opposite doors:**
This subclass is indented under subclass 254. Inclined-bottom cars in which the car bottom inclines downwardly and outwardly both ways from the center to discharge doors on opposite sides of the car.
- 256 Side-spout gondola:**
This subclass is indented under subclass 254. Gondola cars having portions of the flat floor removed, and inclined chutes or spouts extending from the center sill beneath the floor lever to the car sides, where the spouts are closed with doors below the side walls of the gondola.
- SEE OR SEARCH THIS CLASS, SUBCLASS:
249, for multiple-hopper cars with facing center chutes.
- 257 Shifting:**
This subclass is indented under subclass 254. Gondola cars in which the car floor or a part thereon is moved to an inclined position for the discharge of the load by gravity.
- SEE OR SEARCH THIS CLASS, SUBCLASS:
246, for cars having a rising ridge between outlet doors.
- 258 Side-door gondola:**
This subclass is indented under subclass 239. Gondola cars having side or end doors to facilitate loading and unloading.
- 259 Plow car:**
This subclass is indented under subclass 258. Gondola cars designed to be unloaded by a plow operated throughout a train length.
- 260 Coupled side and bottom:**
This subclass is indented under subclass 239. Gondola cars having drop-bottom and side-wall doors operatively interconnected.
- 261.1 Tilting body:**
This subclass is indented under subclass 239. Dumping cars including a load-carrying part which is unloaded by tilting or inclining the load-carrying part in its entirety.
- 261.2 End dumping car:**
This subclass is indented under subclass 261.1. Dumping cars wherefrom unloading is effected by movement of the load along the length of the load-carrying part.
- (1) Note. The load-carrying part of this subclass may be reoriented before dumping to unload beside the supporting rails.
- 262 Inwardly dumping section:**
This subclass is indented under subclass 261.1. Cars having a pair or series of pairs of dumping sections adapted to tilt toward each other and toward the car center and arranged either longitudinally or transversely of the car.
- 263 Outwardly dumping section:**
This subclass is indented under subclass 261.1. Cars having a pair or series of pairs of dumping sections adapted to tilt away from each other toward the car sides or ends.

- 264 Rolling tilt:**
This subclass is indented under subclass 261.1. Lading receptacles having a curved bottom or trunnion supports adapted to have rolling contact with ways on the supporting trunk.
- 265 With motor:**
This subclass is indented under subclass 264. Lading receptacles having a motor for effecting the rolling tilt of the receptacle.
- 266 Worm gear:**
This subclass is indented under subclass 264. Lading receptacles having a worm-gear control to regulate the tilting.
- 267 Screw :**
This subclass is indented under subclass 264. Lading receptacles having a screw to effect the tilting.
- 268 Cam-track tilt:**
This subclass is indented under subclass 261.1. Lading receptacles provided on each side with a plurality of projections adapted to slide along camways on the track to effect tilting of the receptacle.
- 269 Side and tilt:**
This subclass is indented under subclass 261.1. Lading receptacles which in dumping slides longitudinally until they tip at the ends of the ways on which they slide.
- 270 Pivoted:**
This subclass is indented under subclass 261.1. Lading receptacles trunnioned or hung on horizontal pivots carried by the truck.
- 271 With motor:**
This subclass is indented under subclass 270. Lading receptacles having a motor to tilt the receptacle.
- 272 Off center:**
This subclass is indented under subclass 270. Lading receptacles supported on two parallel pivots equidistant from the center of the receptacle for dumping at will to either side of the car, or on a single pivot-line offset from the receptacle center for dumping to one side only.
- 273 Power hoist:**
This subclass is indented under subclass 272. Lading receptacles having a power device for tilting the receptacle.
- 274 One-side dump:**
This subclass is indented under subclass 272. Lading receptacles in which the car body is adapted to tilt one way only.

(1) Note. The pivot is usually off center, so that the body tilts or rights itself by gravity on being unlocked.
- 275 Horizontal rotary:**
This subclass is indented under subclass 274. Lading cars having a turn-table or vertical pivot for the lading receptacle.

SEE OR SEARCH THIS CLASS, SUBCLASS:
28, for locomotive turntables, usually carrying a tool such as a crane or excavator.
455, for turntable connections between car bodies and trucks.
- 276 Displaceable sides:**
This subclass is indented under subclass 261.1. Car bodies provided with hinged or slidable sides or side doors to release the lading upon the tilting of the car body.
- 277 Bodily movable:**
This subclass is indented under subclass 276. Car bodies in which the movable sides or side doors have a movement of translation away from load-retaining position relative to the car body.
- 278 Body prop and tie:**
This subclass is indented under subclass 261.1. Car bodies having struts and tie members to retain the tiltable car body in load-carrying positions.
- 279 Aprons and baffles**
This subclass is indented under subclass 261.1. Car body constructions involving guides and guard walls or plates for directing the placement of the lading during the dumping operation.

- 280 Doors:**
This subclass is indented under subclass 239. Car body constructions involving doors adapted for use on dumping cars only.
- SEE OR SEARCH THIS CLASS, SUBCLASS:
256, for side-spout gondolas with doors.
276 through 277, for tilting body cars with displaceable sides.
- SEE OR SEARCH CLASS:
49, Movable or Removable Closures, appropriate subclasses for closures of the type provided for.
160, Flexible or Portable Closure, Partition, or Panel, subclasses 130 through 236 for doors composed of plural panels interconnected for relative movement mounted upon the side of a car for holding grain in the car and/or allowing grain to be dispensed from the car.
- 281 Interchangeable hinge:**
This subclass is indented under subclass 280. Doors provided with releasable hinges on the opposite edges, so that they may swing from either edge at will.
- SEE OR SEARCH CLASS:
49, Movable or Removable Closures, subclass 193 for a closure movable on alternative axes on opposite ends of the closure.
- 282.1 Sliding:**
This subclass is indented under subclass 280. Doors operable along guideways, which may be comprised of straight, circular, cam, or plural inclined ways and extend parallel to plane of the door.
- 282.2 Having resilient sealing gasket:**
This subclass is indented under subclass 282.1. Door including a relatively soft member of material that will return to its original shape, which soft member is intended to interfit with other body opening structure and create a tight fit between the door and the opening structure.
- 282.3 Driven by rack and pinion:**
This subclass is indented under subclass 282.1. Door including means to force the door from/to open position to/from closed position comprising a bar having gear teeth therealong and a relatively small gear for drively interfitting therewith.
- 283 Offset pivot:**
This subclass is indented under subclass 280. Doors having pivots or hinges located laterally away from the plane of the door.
- 284 Link swing:**
This subclass is indented under subclass 280. Doors in which the links are pivotally connected to the doors, so that there is angular motion between each link and its door.
- 285 Buffers:**
This subclass is indented under subclass 280. Doors having buffer or stop devices to receive the impact of a door.
- 286 Door actuators:**
This subclass is indented under subclass 239. Devices for operating dumping car doors.
- 287 Serial and selective:**
This subclass is indented under subclass 286. Door actuators and releasers for determining the order of operation of a series of doors.
- 288 Multiple door:**
This subclass is indented under subclass 286. Door actuation for a plurality of doors having rigid or fixed connections therebetween, whereby they may be operated as a unit.
- 289 Interconnected:**
This subclass is indented under subclass 288. Door actuators connected to a plurality of independent doors for simultaneously operating same.
- 290 Links:**
This subclass is indented under subclass 289. Door actuators in which the doors are connected for operation through a pair of connected links.

- 291 With hook:**
This subclass is indented under subclass 290. Door actuators having one or more hooks, so as to hang up and lock the doors and links at the end of the door operation.
- 292 Chains:**
This subclass is indented under subclass 289. Door actuators having chain attachments between a plurality of doors for operating the same.
- 293 Creeping shaft:**
This subclass is indented under subclass 286. Door actuators comprising a bodily moving shaft parallel to the door hinges and movable against the lower side of the door and toward its free edge for closing the door.
- (1) Note. The shaft usually travels on fixed guideways on the underframe.
- 294 Rack and pinion:**
This subclass is indented under subclass 293. Door actuators having a rack and pinion for operating the creeping shaft.
- 295 Chain wind:**
This subclass is indented under subclass 293. Door actuators in which the creeping shaft is operated by a chain wrapped one or more turns around the shaft.
- 296 Crankshaft:**
This subclass is indented under subclass 286. Mechanisms in which the door is closed by a crankarm wiping against the underside of the door.
- 297 Creeping:**
This subclass is indented under subclass 296. Door actuators in which the crankshaft itself has a traveling or rolling movement along fixed guideways in the underframe.
- 298 U-crank:**
This subclass is indented under subclass 296. Door actuators in which the crank arms are U-shaped.
- 299 Crank and link:**
This subclass is indented under subclass 286. Door actuators having a crank arm connected through a link to the door.
- SEE OR SEARCH THIS CLASS, SUBCLASS:
291, for multiple door actuators comprising hooks and links.
- 300 Chain winder:**
This subclass is indented under subclass 286. Door actuators comprising means for winding up chains to close doors.
- 301 Creeping-shaft lock:**
This subclass is indented under subclass 300. Chain-winding shafts, which, as the door seats in a closed position, shift bodily under the edge of the door and act as a lock for the door.
- 302 Tension lock shifter**
This subclass is indented under subclass 300. Chain winders in which the door seats in a closed position, a continued operation of the chain winder produces an increased chain tension, which operates the door lock.
- 303 Terminal hook:**
This subclass is indented under subclass 300. Chain winders in which the chain has a hook adjacent its attachment to the door, so that when the latter is closed, the hook engages a locking abutment and holds the door closed.
- 304 Toggle or strut:**
This subclass is indented under subclass 286. Door actuators in which the straightening of a pair of toggle links or moving a strut or prop to upright position pushes the door upward against the car bottom to closed position.
- 305 Rack and pinion:**
This subclass is indented under subclass 286. Door actuators comprising a rack and pinion.
- 306 Lever or chain:**
This subclass is indented under subclass 286. Door actuators comprising a lever and attached links or chains located beneath a door and closing the door when raised.

307 Screw or worm:

This subclass is indented under subclass 286. Door actuators comprising a screw or worm device.

308.1 Having door latch:

This subclass is indented under subclass 239. Dumping body having means to physically secure a door in a closed position.

SEE OR SEARCH THIS CLASS, SUB-CLASS:

364, for a mine cars which may have a door latch.

308.2 Toggle:

This subclass is indented under subclass 308.2. Dumping body wherein the securing means includes a pair of links pivotally fitting together and adapted to limitedly snap past the center line with the ends of the links in latching the door to either (1) secure the door directly or (2) secure a door latching pin.

309 Shifting-shaft:

This subclass is indented under subclass 308. Door locks comprising a shaft which is moved bodily under the free edge of the door for locking it.

SEE OR SEARCH THIS CLASS, SUB-CLASS:

293 through 295, for creeping shaft door actuators.

301, for chain winding door actuators with creeping-shaft lock.

310 Door actuator operated:

This subclass is indented under subclass 308.1. Door locks in which the device which opens or closes the door also operates the door lock.

310.1 Bolt pivoted about axis parallel to door plane:

This subclass is indented under subclass 308.1. Dumping body wherein the means to physically secure a door comprises a member attached to the door or to body structure and adapted to turn about a line that extends in a direction that is parallel with the surface of the door in order to block relative movement of the door and body structure.

310.2 Sliding bolt:

This subclass is indented under subclass 308.1. Dumping body wherein the means to physically secure a door comprises a member attached to the door or to a door structure and adapted to move along its length in order to block relative movement of the door and body structure.

311.1 Control:

This subclass is indented under subclass 239. Dumping cars including (1) means utilizing energy of an external source, e.g., momentum of the car, etc., to effect dumping; (2) means to limit the degree of opening of a door, e.g., a chain, etc., or (3) means to drive car body closure from one position to another.

SEE OR SEARCH THIS CLASS, SUB-CLASS:

286 through 307, for a dumping car with a door actuator.

311.2 Lost motion:

This subclass is indented under subclass 311.1. Dumping car wherein including means to open the closure thereof having play in the drive train thereof, so that opening movement of the door does not necessarily effect corresponding movement of the drive train element.

(1) Note. Included in this subclass is a device providing safety for the person operating the door in dumping. Once the door is moved, the weight freight therein could, without the lost-motion clutch, overpower the person.

312 Ratchet-handle:

This subclass is indented under subclass 311.1. Dump door controls comprising ratchet-handle devices.

313 Shaft lock:

This subclass is indented under subclass 311.1. Dump car controls comprising locking devices for shafts used in door control.

314 Sleeping:

This subclass is indented under subclass 238.1. Car bodies adapted to provide sleeping accommodations for passengers.

- 315 Arrangement:**
This subclass is indented under subclass 314. Interior arrangement of cars involving compartments, seats, berths, closets, and storage-places to adapt a car for day and night travel.
- 316 Berths:**
This subclass is indented under subclass 314. Sleeping car constructions comprising berth fixtures involving some modifications of the car interior.
- 317 Vertically movable:**
This subclass is indented under subclass 316. Berths movable bodily and vertically as unitary beds from the car top downwardly or upwardly from the floor.
- 318 With hoist:**
This subclass is indented under subclass 317. Berths having means for effecting the berth movement.
- 319 Collapsible:**
This subclass is indented under subclass 316. Berths having frames in small sections adapted to be folded or collapsed against the car wall; also collapsible pneumatic berths.
- 320 Hammock type:**
This subclass is indented under subclass 316. Berths formed of tensioned fabrics, somewhat like a hammock.
- 321 Hinged:**
This subclass is indented under subclass 316. Berths hinged to the car wall and adapted to be folded upwardly when not in use.
- 322 Seat back and upper:**
This subclass is indented under subclass 316. Berths in which seat backs are moved upwardly and into horizontal positions to form upper berths.
- 323 Partitions:**
This subclass is indented under subclass 314. Sleeping car constructions comprising movable partitions for night use in sleeping cars.
- 324 Curtains and rods:**
This subclass is indented under subclass 314. Sleeping car constructions comprising curtain and rod fixtures for use around berths.
- 325 Article holders:**
This subclass is indented under subclass 314. Sleeping car constructions comprising devices for holding clothing and other items at night.
- 326 Ladders and steps:**
This subclass is indented under subclass 314. Sleeping car apparatus comprising steps and ladders to facilitate entrance to upper berths.
- 327 Dining:**
This subclass is indented under subclass 238.1. Cars provided with kitchen and dining facilities.
- 328 Merchandising:**
This subclass is indented under subclass 238.1. Cars designed for the use of traveling salesmen or for the display of merchandise or other articles.
- 329.1 Passenger:**
This subclass is indented under subclass 238.1. Special car body particularly adapted to the transportation of people.
- 330 Rolling:**
This subclass is indented under subclass 329.1. Passenger cars, in which the body is in the form of a ball or cylinder, which is adapted to be rolled along the track.
- SEE OR SEARCH THIS CLASS, SUB-CLASS:
356, for similar cars for freight.
- 331 Combined open and closed:**
This subclass is indented under subclass 329.1. Passenger cars having a portion of the passenger space open at the sides and another portion closed in at the sides.
- 332 Convertible open and closed:**
This subclass is indented under subclass 329.1. Passenger cars adapted to be used as an open-sided summer car or to be converted into a closed-sided winter car at will.

SEE OR SEARCH CLASS:

- 160, Flexible or Portable Closure, Partition, or Panel, appropriate subclasses for closures made of flexible material, or made of plural strips, slats, or panels interconnected for relative motion, including such structures claimed in combination with other types of closures or other types of flexible and portable panels, where the features of car structure claimed are only those necessary for the mounting and operating of the closure.
- 333 Vertical sliding panel:**
This subclass is indented under subclass 332. Convertible passenger cars in which vertically sliding panels between the side posts of the car may be adjusted to make the car an open or closed car.
- 334 Roof storage:**
This subclass is indented under subclass 333. Cars in which the vertically sliding panels may be pushed under the roof if desired.
- 335 Drop storage:**
This subclass is indented under subclass 333. Cars in which the sliding panels may be dropped low in the side wall or under the floor when desired.
- 336 Seat-back panel:**
This subclass is indented under subclass 332. Cars in which the seats aligned along the car side have the seat backs forming an exterior panel of the car side which is pocketed to receive an upper sliding panel.
- 337 Removable sides:**
This subclass is indented under subclass 332. Cars in which the side walls of the car, made in one or two sections, may be removed.
- 338 Removable panels:**
This subclass is indented under subclass 332. Cars having individual panels between the side posts which may be removed.

- 339 Spaced sliding doors:**
This subclass is indented under subclass 332. Cars in which the side panels of the car are made up of alternating fixed panels and sliding panels or doors.
- 340 Double deck:**
This subclass is indented under subclass 329.1. Passenger cars provided with upper and lower decks or floors for passenger accommodation.
- 341 Entrance and exit control:**
This subclass is indented under subclass 329.1. Passenger car arrangements comprising steps, doors, conductor's and motormen's stations, and partition bars to facilitate the collection of fares and to systematize the entrance and exit of passengers to and from the cars.
- SEE OR SEARCH CLASS:
- 49, Movable or Removable Closures, subclass 24 for a plurality of closures controlled individually and jointly through a master control, and subclass 49 for a closure combined with means to direct or control traffic when no defined train control or car structure or arrangement is included.
- 91, Motors: Expansible Chamber Type, appropriate subclasses for expansible chamber motors for operating gates or doors.
- 303, Fluid-Pressure and Analogous Brake Systems, appropriate subclasses for fluid pressure brakes combined with door operating motors.

- 341.5 Turnstile:**
This subclass is indented under subclass 341. Arrangements of the turnstile type to facilitate the collection of fares and to systematize the entrance and exit of passengers to and from cars.

- 342 Motorman's compartment:**
This subclass is indented under subclass 329.1. Passenger cars having special arrangements for motorman's cab or compartment.

SEE OR SEARCH THIS CLASS, SUBCLASS:

- 341, for entrance and exit control combined with motorman's station.

- 343 Door arrangement:**
This subclass is indented under subclass 329.1. Passenger car constructions involving door location and arrangement.
- SEE OR SEARCH THIS CLASS, SUBCLASS:
341, for passenger entrance and exit control.
- 344 Passenger placement:**
This subclass is indented under subclass 329.1. Passenger car constructions involving the relative arrangement of seats, standing-room, handholds, doors, and trainmen's space whereby the interior passenger capacity of a car may be utilized in a desired way.
- SEE OR SEARCH THIS CLASS, SUBCLASS:
340, for double deck cars.
341, for entrance and exit control.
- 345 Seats:**
This subclass is indented under subclass 344. Passenger car constructions comprising seats built into and forming part of a car structure.
- 346 Open car:**
This subclass is indented under subclass 345. Seats for summer cars placed transversely and framed against the side posts.
- 347 End panels:**
This subclass is indented under subclass 346. Seat construction comprising seat and panels fastened to the side posts.
- 348 Emergency exits:**
This subclass is indented under subclass 329.1. Passenger car constructions comprising closed openings through the floor, roof, or walls of a car, adapted to be opened only in case of emergency for escape of passengers.
- 349 Automatic:**
This subclass is indented under subclass 348. Emergency exits in which the closures for the openings are automatically actuated, as by the overturning of a car, for example.
- 350 Dust guards:**
This subclass is indented under subclass 329.1. Passenger car constructions comprising devices tending to lessen the dust contents of the air in the vicinity of car doors or windows.
- 351 Car bottom:**
This subclass is indented under subclass 350. Dust guards tending to limit the distribution of dust from the road bed by the action of the car wheels and trucks.
- 352 With collector:**
This subclass is indented under subclass 351. Dust guards having dust-collecting troughs in the vicinity of the trucks.
- 353 Storm fronts:**
This subclass is indented under subclass 329.1. Passenger car constructions involving glass fronts and protective closures for motormen on electric cars.
- SEE OR SEARCH CLASS:
160, Flexible or Portable Closure, Partition, or Panel, appropriate subclasses for storm fronts in the form of flexible and portable panels, including their mounting and/or operating means and combinations with rigid closures, including windshields. Such combinations claimed in combination with other vehicle structure, e.g., windshield wipers, glare shields, etc., or when the relation to the vehicle is claimed, are in Class 105.
296, Land Vehicles: Bodies and Tops, subclasses 77.1 through 96.22 for storm fronts for land vehicles.
- 354 Hand straps:**
This subclass is indented under subclass 329.1. Passenger car constructions involving depending straps and handholds for safety of standing passengers.
- SEE OR SEARCH CLASS:
40, Card, Picture, or Sign Exhibiting, subclass 318 for car hand straps carrying advertising indicia thereon.

355 Freight:

This subclass is indented under subclass 238.1. Cars designed for the carrying of freight.

SEE OR SEARCH CLASS:

410, Freight Accommodation on Freight Carrier, appropriate subclasses for a freight carrier of any category, including railway, provided with means particularly for inhibiting the undesirable effects of untoward occurrences on the lading while on board; see, for example: subclasses 2 through 50 for means on the freight carrier engageable with a particular article, i.e., of such shape as to present a vulnerability which is overcome by the way said means accommodates the article; subclasses 52-95 wherein the freight carrier accommodating means contacts a stowed load bearer such as a semitrailer (56-65) or other wheeled (66-67) or wheelless containers; for example, subclasses 77-86 wherein containers are positively retained on the freight carrier; subclasses 96-116 wherein indiscriminate load units are lashed on board a freight carrier; and subclasses 121-155 wherein the load unit is accommodated by load bracing means.

356 Rolling:

This subclass is indented under subclass 355. Freight-carrying receptacles in the form of drums or cylinders, which are adapted to be rolled along the track.

SEE OR SEARCH THIS CLASS, SUBCLASS:

330, for similar cars for passengers.

357 Vacuum wall:

This subclass is indented under subclass 355. Freight cars with double walls, from between which the air may be exhausted to stabilize the interior temperature of the car.

358 Tank:

This subclass is indented under subclass 355. Freight cars designed to carry fluid material.

SEE OR SEARCH CLASS:

410, Freight Accommodation on Freight Carrier, subclass 68 for a freight carrier of any category including railway provided with accommodating means for rigid wall fluid-filled containers, i.e., means in contact with the container(s) to inhibit untoward movement thereof while on board.

359 Combined freight:

This subclass is indented under subclass 358. Cars having fluid-carrying tanks and also adapted to carry ordinary freight.

360 Tank form:

This subclass is indented under subclass 358. Tank cars involving variations in tank form.

SEE OR SEARCH CLASS:

410, Freight Accommodation on Freight Carrier, subclass 68 for a freight carrier which accommodates a plurality of removable containers for bulk material.

361 Longitudinally slidable:

This subclass is indented under subclass 358. Tank cars with provision for longitudinal movement of the tank relative to the supporting cradles or underframes.

362 Saddle and anchors:

This subclass is indented under subclass 358. Tank car constructions including tank-supporting saddles, bolsters, and anchoring devices for holding the tank in place.

363 Knockdown body:

This subclass is indented under subclass 355. Freight car bodies designed to be folded down upon their under-frames or to be separated into sections, as for marine shipment.

364 Mine:

This subclass is indented under subclass 355. Cars of low narrow gauge for use in mines.

(1) Note. The wheel axles are attached directly to the car bottom.

- SEE OR SEARCH THIS CLASS, SUB-CLASS:
275, for horizontally rotary tilting dumping cars.
- 365 Tubular way:**
This subclass is indented under subclass 355. Freight cars designed for use in cylindrical passage, such as tunnels, kilns, and treatment tanks.
- SEE OR SEARCH CLASS:
104, Railways, subclass 138.1 for tubular railways.
- 370 Convertible deck:**
This subclass is indented under subclass 355. Boxcars which are convertible into a multiple floor or deck car at will.
- SEE OR SEARCH CLASS:
410, Freight Accommodation on Freight Carrier, subclasses 26 through 29.1 for a multideck freight car for transporting wheeled vehicles.
- 371 Sectional:**
This subclass is indented under subclass 370. Convertible boxcars in which the supplemental floor or deck is made in sections.
- 372 Side hinge:**
This subclass is indented under subclass 371. Convertible boxcars in which the deck or floor sections are hinged to the car walls.
- 373 Tiered crates and slides:**
This subclass is indented under subclass 355. Freight cars provided with vertical tiers of slides or crates designed as car fixtures for shipping fruit or fragile articles.
- 374 Interior end buffers:**
This subclass is indented under subclass 355. Freight cars having buffers inside the car for taking up the shock in case the lading shifts longitudinally.
- 375 Auxiliary floors:**
This subclass is indented under subclass 355. Freight cars having independent auxiliary floors adapted to rest upon the main car floor, as in case of refrigerator cars.
- SEE OR SEARCH CLASS:
52, Static Structures (e.g., Buildings), subclasses 660 through 676 for fabric or lattice openwork of more general application including slatted floor covering and gratings.
- 404, Road Structure, Process, or Apparatus, subclasses 17 through 70 for walkway and floor-like structure.
- 377.01 Movable cover:**
This subclass is indented under subclass 355. Subject matter wherein the uppermost space bounded by the top of sidewalls of the car is covered by a movable member.
- SEE OR SEARCH CLASS:
296, Land Vehicles: Bodies and Tops, subclasses 100.01 through 100.18 for a top of the freight load vehicle.
- 377.02 Flexible material (e.g., tarp, etc.):**
This subclass is indented under subclass 377.01. Subject matter wherein the movable member is made of thin, bendable material, e.g., tarp, plastic etc.
- 377.03 Mounted on removable frame:**
This subclass is indented under subclass 377.02. Subject matter comprising a support structure removably mounted on the car wherein the cover is mounted on the support structure.
- 377.04 Having multiple folding sections:**
This subclass is indented under subclass 377.01. Subject matter wherein the member consists of a plurality of segments connected by a structure which permits the segments to be doubled upon themselves.
- 377.05 Hinged to car body:**
This subclass is indented under subclass 377.01. Subject matter wherein the member is attached to the car by a jointed or flexible device which permits a turning or pivoting of the movable member.
- 377.06 With actuator:**
This subclass is indented under subclass 377.05. Subject matter including a mechanism for causing the turning or pivoting of the movable member.

- (1) Note. The mechanism includes a hydraulic, pneumatic, or spring device.

377.07 Hatch:

This subclass is indented under subclass 377.05. Subject matter wherein the member includes a substantially smaller opening located therein.

377.08 With seal:

This subclass is indented under subclass 377.01. Subject matter comprising a means for preventing the passage of foreign matter wherein the member is supported by an underlying surface of the car and the means is located between the member and the surface for preventing the passage of the foreign matter therethrough.

377.09 Sliding:

This subclass is indented under subclass 377.01. Subject matter wherein the member is moved by sliding it on a supporting structure.

377.1 Substantial sidewall portion:

This subclass is indented under subclass 377.01. Subject matter wherein the member forms a substantial part of a perimeter wall of the car.

377.11 Locking device:

This subclass is indented under subclass 377.01. Subject matter wherein the member includes a securing means for preventing an unauthorized access to the inside of the car.

- (1) Note. Mere fastener means such as hooks or clamps or bolts attached to the member or to the body of the car do not constitute a locking device for this subclass.

SEE OR SEARCH THIS CLASS, SUBCLASS:

308.1 through 310.2, for door latch for car bodies adapted to unload by dumping.

378 Movable side sections:

This subclass is indented under subclass 355. Freight cars having openings in the car walls and closures therefor.

- (1) Note. This subclass does not include freight car doors with or without their operating or mounting means.

- (2) Note. Closures on plural walls which are not interconnected for concurrent movement or do not close a continuous opening will be found in this Class (105).

SEE OR SEARCH THIS CLASS, SUBCLASS:

258 through 259, for side door gondolas.
280 through 285, for dumping doors.
286 through 307, for dumping door operators.

SEE OR SEARCH CLASS:

49, Movable or Removable Closures, (see (1) and (2) Notes).
160, Flexible or Portable Closure, Partition, or Panel, (see (1) Note).

379 Extension side walls:

This subclass is indented under subclass 355. Freight cars having auxiliary side boards or walls for increasing the wall height of open-top cars.

380 Stakes:

This subclass is indented under subclass 355. Freight cars having stakes for holding logs or other lading on logging or flat cars and for holding up the walls of gondola cars.

SEE OR SEARCH CLASS:

280, Land Vehicles, subclasses 143 through 148 for land vehicle bolsters and standards.
296, Land Vehicles: Bodies and Tops, subclass 43 for stakes and sockets for land vehicles.

381 Side folding:

This subclass is indented under subclass 380. Stake-type freight cars in which the stakes have a folding movement in the vertical plane of the car sides.

382 Releasable:

This subclass is indented under subclass 380. Stake-type freight cars in which the stakes on being unlocked may fall outwardly and release the lading.

- 383 Pocket openers:**
This subclass is indented under subclass 382. Releasable stake cars in which a closure on a wall of the stake pocket is released to permit the stake to fly out under load pressure.
- 384 Direct detent:**
This subclass is indented under subclass 382. Releasable stake cars in which a pawl, hook, or locking lug directly engages the stake or a lug thereon to hold the stake upright.
- 385 Horizontal slide:**
This subclass is indented under subclass 382. Releasable stake cars in which the stake slides outwardly on horizontal guides as a preliminary movement to falling to load release position.
- 386 Vertical slide:**
This subclass is indented under subclass 382. Releasable stake cars in which the stake move to load-releasing position by a vertical sliding movement.
- 387 Collapsible:**
This subclass is indented under subclass 382. Releasable stake cars in which the stake is usually in the form of an articulated inverted V, which is adapted to collapse or flatten out when unlocked.
- 388 Chain release:**
This subclass is indented under subclass 382. Releasable stake cars in which the stake is held upright by a chain under tension, upon release of which the stake falls.
- 389 Telescopic:**
This subclass is indented under subclass 380. Stake-type cars in which the stake is made up of a plurality of telescopic or sliding sections.
- 390 Pockets:**
This subclass is indented under subclass 380. Stake-type cars having sockets or pockets adapted to hold car stakes.
- 391 Folding:**
This subclass is indented under subclass 390. Stake pockets adapted to collapse or fold out of the way when not in use.
- 392 Freight-contacting rollers:**
This subclass is indented under subclass 355. Freight cars having anti-friction rolls in car doorways or on the car floor to facilitate freight-handling.
- SEE OR SEARCH CLASS:
492, Roll or Roller, appropriate subclasses for a roll, per se, not elsewhere provided for, and see the notes thereunder.
- 392.5 Shock absorbing:**
This subclass is indented under subclass 238.1. Car bodies modified to take up the shock of collisions or severe bumps.
- SEE OR SEARCH CLASS:
213, Railway Draft Appliances, subclasses 220 through 223 for car buffers, per se.
- 393 Expansible:**
This subclass is indented under subclass 238.1. Cars adapted to be extended laterally or longitudinally to increase their floor space, or foldable house cars.
- 394 Armored and protected:**
This subclass is indented under subclass 238.1. Express cars, usually metallic, designed to be bullet-proof and provided with defensive means and protective devices for guarding against train robbery.
- 395 Automatic door lock:**
This subclass is indented under subclass 238.1. Cars having door locks under control of the air-brake system or the engineer or by the train or car movement.
- (1) Note. The objects are to prevent passengers opening car doors while the car is moving and to prevent robbery from freight cars.
- 396 CAR FRAMING AND STRUCTURE:**
This subclass is indented under the class definition. Car constructions involving frame and structure designed as a load sustainer and carrier and a unit subjected to train shocks.

- SEE OR SEARCH CLASS:
52, Static Structures (e.g., Buildings), subclasses 41 through 44 and 45-56 for a car roof construction.
- 397 Passenger:**
This subclass is indented under subclass 396. Car constructions includes passenger car structure not otherwise classified.
- SEE OR SEARCH CLASS:
280, Land Vehicles, subclasses 781 through 800 for land vehicle frames.
- 398 Depressed side door:**
This subclass is indented under subclass 397. Passenger cars having depressed underframes to provide low side entrances.
- 399 Truss:**
This subclass is indented under subclass 397. Passenger car frames in which a series of struts and ties are used in the side walls.
- 400 Continuous rib:**
This subclass is indented under subclass 397. Passenger cars in which a pair of side posts and a carline of a car are replaced by a unitary inverted U-shaped member arched over the underframe.
- SEE OR SEARCH THIS CLASS, SUBCLASS:
334, for the roof-storage-type of convertible open and closed passenger car.
- 401 Metal sheathing:**
This subclass is indented under subclass 397. Passenger cars having metal sheathing or plates in their frames.
- SEE OR SEARCH THIS CLASS, SUBCLASS:
409 through 410, for metal sheathing for freight cars.
- SEE OR SEARCH CLASS:
52, Static Structures (e.g., Buildings), appropriate subclasses for various constructions of more general application which have exterior sheathing, particularly subclasses 330, 459-472, 474-761, and 518-560.
- 402 Ends:**
This subclass is indented under subclass 397. Passenger car constructions involving end structure.
- 403 Cast:**
This subclass is indented under subclass 402. Passenger car ends having cast metallic framing members.
- 404 Freight:**
This subclass is indented under subclass 396. Freight car structure not otherwise classified.
- SEE OR SEARCH CLASS:
280, Land Vehicles, subclasses 781 through 800 for land vehicle frames.
410, Freight Accommodation on Freight Carrier, appropriate subclasses, especially subclasses 106 through 110 for a lading tiedown anchor structure.
- 405 Concrete:**
This subclass is indented under subclass 404. Freight cars in which concrete or cement structure is used in whole or in part.
- 406.1 Gondola:**
This subclass is indented under subclass 404. Freight car framing and structure of particular utility to an open-top railway car having a floor, two vertical side walls, and two vertical end walls.
- 406.2 Drop end door:**
This subclass is indented under subclass 406.1. Freight car framing and structure including provision for replacably opening one of the end walls by movement thereof about an axis parallel to and located near the floor.
- 407 Truss:**
This subclass is indented under subclass 404. Freight car frames in which tie and strut elements are used in the car walls.
- 408 Timber pockets:**
This subclass is indented under subclass 404. Freight car constructions involving castings and abutment plates to receive the ends of car posts.

- 409 Metal sheathing:**
This subclass is indented under subclass 404. Freight car constructions involving metal-plate side walls.
- SEE OR SEARCH THIS CLASS, SUB-CLASS:
401, for metal sheathing for passenger cars.
- SEE OR SEARCH CLASS:
52, Static Structures (e.g., Buildings), appropriate subclasses for various constructions of more general application which have exterior sheathing, particularly subclasses 459 through 472, 474-761, and 518-560.
- 410 Ends:**
This subclass is indented under subclass 409. Freight car sheathing comprising sheet-metal ends for cars.
- 411 Braces:**
This subclass is indented under subclass 404. Freight cars having special braces.
- 412 Shrinkage take-ups:**
This subclass is indented under subclass 404. Freight cars having means for taking up the shrinkage in wooden side walls.
- 413 Underframes:**
This subclass is indented under subclass 396. Car structures involving under or floor frames for all types of cars.
- 414 Metallic:**
This subclass is indented under subclass 413. Under or floor frames which are metallic.
- SEE OR SEARCH THIS CLASS, SUB-CLASS:
358 through 362, for tank-type freight cars.
- 415 Cast:**
This subclass is indented under subclass 414. Under or floor frames made by casting.
- 416 Mono-center sill type**
This subclass is indented under subclass 414. Underframes in which the center sill is made from a single beam, which may be integral or two contacting beams riveted together.
- 417 Spread-center sill type:**
This subclass is indented under subclass 414. Underframes in which the center sills are spaced more widely apart than in an ordinary double-center construction, such as for accommodation of hopper-car body, for example.
- 418 Longitudinal sills:**
This subclass is indented under subclass 414. Underframe constructions involving longitudinal side or center sills only.
- 419 Cross bearers:**
This subclass is indented under subclass 414. Underframe construction involving only cross members in the under-frame intermediate the ends thereof.
- 420 Draft-sill framing:**
This subclass is indented under subclass 396. Underframe constructions involving connections of the draft-sills to the end sills, bolsters, or center sills.
- SEE OR SEARCH CLASS:
213, Railway Draft Appliances, appropriate subclasses, particularly subclass 57 for drawbar connections to the draft-sills.
- 421 End sills:**
This subclass is indented under subclass 396. Underframe constructions involving structure and connections of end sills only.
- SEE OR SEARCH THIS CLASS, SUB-CLASS:
173, for locomotive frame buffer beams.
402 through 403, for cast ends for passenger cars.
- 422 FLOORS:**
This subclass is indented under the class definition. Car constructions involving floors for all types of cars.

- SEE OR SEARCH THIS CLASS, SUB-CLASS:
375, for auxiliary floors for freight cars.
- SEE OR SEARCH CLASS:
404, Road Structure, Process, or Apparatus, appropriate subclasses, especially subclasses 17 through 70 for walkway and floor-like structure.
- 423 LININGS:**
This subclass is indented under the class definition. Car constructions comprising fabric, metallic, and other linings for car interiors.
- SEE OR SEARCH CLASS:
428, Stock Material or Miscellaneous Articles, appropriate subclasses for a stock material product in the form of a single or plural layer web or sheet; see especially subclasses 175 through 176, 190, 193, and 196-197 for such a product embodying a fabric or textile, and subclasses 457-472.3 for a composite web or sheet including metal as one of the layers.
442, Fabric (Woven, Knitted, or Nonwoven Textile or Cloth, etc.), subclasses 181 through 303 and 304-319 for a woven or knit fabric.
- 424 ANTILEAK JOINTS:**
This subclass is indented under the class definition. Freight cars having special joint fixtures to prevent leakage of granular material.
- 425 PLATFORMS:**
This subclass is indented under the class definition. End platform structure for all railway rolling stock.
- SEE OR SEARCH THIS CLASS, SUB-CLASS:
341, for passenger car entrance and exit controls.
342, for motorman's compartment.
- 426 Trapdoors:**
This subclass is indented under subclass 425. Platforms having horizontal trap doors or closures over car steps.
- 427 Operated with gate and step:**
This subclass is indented under subclass 426. Platform constructions having trap doors, vertical gates or doors, and movable steps all operatively connected together.
- 428 Diagonal sectional:**
This subclass is indented under subclass 426. Trap doors cut across diagonally and hinged together along the cut, so as to be foldable.
- 429 With gate:**
This subclass is indented under subclass 426. Trap doors operatively connected with a gate or door closing the entry to the platform.
- 430 With steps:**
This subclass is indented under subclass 426. Trap doors operatively connected with the shiftable steps located beneath the trap door.
- SEE OR SEARCH THIS CLASS, SUB-CLASS:
427, for trap doors, vertical gates, or doors and movable steps, all operatively connected together.
- 431 Convertible:**
This subclass is indented under subclass 430. Trap doors which may be converted into a series of steps, and vice versa.
- 432 Actuators:**
This subclass is indented under subclass 426. Trap doors having operating means.
- 433 Lateral shifter:**
This subclass is indented under subclass 432. Actuators for trap doors, which are slid laterally to project from the car side to register with a station platform.
- 434 Spring:**
This subclass is indented under subclass 432. Actuators for trap doors, comprising spring devices for throwing up or aiding in throwing up the doors.
- 435 Lock and starter:**
This subclass is indented under subclass 426. Trap doors having locks for holding them down and starters for initiating the opening movement of the trap after it is unlocked.

- 436 Side gangway:**
This subclass is indented under subclass 425. Platforms having means for laterally bridging the space between a car platform or car floor and an adjacent track platform.
- (1) Note. This subclass includes door operated gangways, and also those constructions where the door itself constitutes a gangway in one position.
- SEE OR SEARCH THIS CLASS, SUBCLASS:
393, for car bodies in which parts can be shifted to expand or contract the floor space.
433, for laterally shiftable trap doors.
- SEE OR SEARCH CLASS:
14, Bridges, subclasses 69.5 through 72.5 for gangways of general application.
- 437 STEPS WITH GATE:**
This subclass is indented under the class definition. Car construction in which the movement of a car door or gate is interconnected for operation with the car steps.
- 438 Convertible:**
This subclass is indented under subclass 437. The car step and gate construction involves the conversion of the steps into a door or gate to bar the way to a car platform.
- 439 SIDE GUARDS:**
This subclass is indented under the class definition. Car constructions involving side barriers on open street cars or in other similar relation to railway rolling stock.
- 440 Single passage:**
This subclass is indented under subclass 439. Side barriers each of which controls single or individual passageways, as on an open street car.
- 441 Seat shifter:**
This subclass is indented under subclass 440. Side barrier constructions in which the reversal of the seat-backs of an open street car controls the side guards on both sides of the car.
- 442 Long drop bar:**
This subclass is indented under subclass 439. Side barriers in which the bars drop from the top of the car or are raised from the bottom to form side barriers at the ends of the seats in an open-type street car.
- 443 STEPS:**
This subclass is indented under the class definition. Steps adapted for use only on railway rolling stock.
- SEE OR SEARCH CLASS:
52, Static Structures (e.g., Buildings), subclasses 177 through 181 for wear or friction increasing traffic carrying surface, and subclasses 182-191 for miscellaneous stepped surfaces.
182, Fire Escape, Ladder, or Scaffold, subclasses 93 through 99 for a wall-attached ladder.
280, Land Vehicles, subclass 163 for steps for land vehicles.
- 444 Electric control:**
This subclass is indented under subclass 443. Steps which are shiftable and are either electrically controlled or control an electric circuit.
- 445 Pneumatic control:**
This subclass is indented under subclass 443. Steps which are shifted by a pneumatic motor.
- 446 Car-movement control:**
This subclass is indented under subclass 443. Car steps which are thrown into inoperative position by the movement of the car.
- 447 Folding:**
This subclass is indented under subclass 443. Steps pivoted so as to be folded or swung to inoperative position.
- 448 Z-fold riser:**
This subclass is indented under subclass 447. Steps in which step riser or link connection is pivoted to the adjacent step treads, so that they may be folded together.
- 449 Slidable:**
This subclass is indented under subclass 443. Steps which are slid into operative position.

- 450 Cover:**
This subclass is indented under subclass 443. Cover guards for steps to prevent the use of the steps.
- 451 HEATING DEVICES:**
This subclass is indented under the class definition. Railway car heating devices for loosening ore or coal, so that it can be readily unloaded, and other special purposes.
- SEE OR SEARCH CLASS:
237, Heating Systems, appropriate sub-classes for car heating.
- 452 SOUND DEADENERS:**
This subclass is indented under the class definition. Devices, for elimination of noise on railway rolling stock.
- SEE OR SEARCH CLASS:
181, Acoustics, subclass 207 for sound deadening devices on mechanical vibrating structure.
295, Railway Wheels and Axles, subclass 7 for sound deadeners on wheels.
- 453 BODY SUSPENSION AND SPRINGS:**
This subclass is indented under the class definition. Car body suspension devices and spring supports located in whole or in part above the underframe.
- 454 LONGITUDINALLY MOVABLE BODY:**
This subclass is indented under the class definition. Car bodies which have a longitudinal slidable movement relatively to the truck.
- SEE OR SEARCH THIS CLASS, SUB-CLASS:
361, for longitudinally slidable tank car bodies.
- 455 HORIZONTAL ROTARY:**
This subclass is indented under the class definition. The car body has a turntable or vertical pivotal connection with the truck.
- SEE OR SEARCH THIS CLASS, SUB-CLASS:
28, for locomotives with turntable connections.
- 275, for tilting body dump cars with turntable connections.
- 456 CABS:**
This subclass is indented under the class definition. Railway rolling stock having trainmen's compartments on locomotives and on top of freight cars.
- SEE OR SEARCH THIS CLASS, SUB-CLASS:
34, for power tool and other locomotive constructions with operator's station on turntable.
342, for such compartments built into motor passenger cars.
- 457 RUNNING BOARDS AND RAILS:**
This subclass is indented under the class definition. Railway rolling stock having trainmen's running boards and hand rails on the tops or sides of cars.
- SEE OR SEARCH THIS CLASS, SUB-CLASS:
341, for passenger entrance and exit arrangements.
- 458 SAFETY BRIDGES:**
This subclass is indented under the class definition. Railway rolling stock having bridging devices between adjacent coupled cars to permit safe passage therebetween or to catch a trainmen falling from the top and between the cars.
- SEE OR SEARCH THIS CLASS, SUB-CLASS:
436, for side gangway devices.
- 459 Locomotive and tender:**
This subclass is indented under subclass 458. Bridging devices located where the fireman usually stands, which in case of uncoupling of the tender may prevent the falling of the fireman.
- 460 END FOOTBOARDS:**
This subclass is indented under the class definition. Railway rolling stock constructions comprising low transverse footboards on the ends of switch engines and freight cars for the use of trainmen.

461 GRAB IRONS:

This subclass is indented under the class definition. Railway rolling stock having bar handholds.

462 POLING, ROPING, AND JACKING IRONS:

This subclass is indented under the class definition. Railway rolling stock having abutment fixtures adapted for temporary engagement with side track push rods, ropes, chains, or lifting jacks.

463.1 MISCELLANEOUS:

This subclass is indented under the class definition. Railway rolling stock not provided for above.

- (1) Note. An accessory for railway rolling stock not provided for in a preceding subclass or in another class may be found in this subclass.

END